LIBRARY
UNIVERSITY OF MICHIGAN
ANN ARBOR, MICHIGAN

JUL 14 1942

The Teachers College JOURNAL

The Contents of The Journal Are Indexed in The Education Index

VOLUME XIII JULY, 1942 NUMBER 6

Indiana State Teachers College

Terre Haute, Indiana

THE TEACHERS COLLEGE JOURNAL

Volume XIII | JULY, 1942 | Number 6

CONTENTS

The Courage in the Heart of You — Page 121
Doris Lundgren

Equipping a High-School Chemistry Laboratory — Page 122
Robert Ray Bennett

Competencies Aimed at in the Education of Teachers at Indiana State Teachers College — Page 125

Education for Life or Education as Life — Page 127
J. R. Shannon

Abstracts of Unpublished Masters' Theses, 1941-1942 — Page 129

Index of Authors, Volume XIII — Page 142

Index of Titles, Volume XIII — Page 143

THE JULY COVER

The "good old summertime" on the "banks of the Wabash" can not be illustrated much better than by some views on the campus of Indiana State Teachers College. The picture chosen is of the new Commerce and Fine Arts Builidng, showing in the foreground the foliage of Ailanthus altissima, which is peculiarly prolific in Terre Haute.

RALPH N. TIREY, PRESIDENT

J. R. SHANNON, EDITOR

EDITORIAL BOARD

FLORISE HUNSUCKER — JOHN F. SEMBOWER

VICTOR C. MILLER — J. E. GRINNELL

J. C. TRANBARGER

Published bi-monthly by the Indiana State Teachers College, Terre Haute, Indiana.

Entered as second-class matter October 5, 1931, at the post office at Terre Haute, Indiana, under the act of August 24, 1912.

EDUCATIONAL PRESS ASSOCIATION OF AMERICA

The Courage In The Heart Of You

Doris Lundgren

This class-day address by Miss Lundgren was delivered at the Alumni-Senior Convocation June 5, 1942. In many respects Miss Lundgren may be considered the outstanding member of the 1942 Class of Indiana State Teachers College, as her selection as one of the two class-day speakers attests. At commencement the following morning Miss Lundgren was given the William C. Ball English award, which goes each year to the member of the graduating class who has had the best record in English during the four years in college. Had there been an award for social insight and life philosophy, Miss Lundgren doubtless would have been the recipient of it also.

Miss Lundgren

We of the Class of 1942 have little to say this morning. We realize that these are not days for talking; they are days for hard thinking and hard working. There are bigger things than usual doing in the world—and we who have been here for four years attending classes, reading books observing and learning, are now deemed ready to step out and see what they are all about.

Tomorrow we shall be ushered forth from this institution. But before we take that formal step, we must halt, ask ourselves a few questions, and give a few honest answers so that we may accept our diplomas with a new sense of what they can represent to us and to the world.

What are some of the questions and some of the answers that should be asked and given before commencement tomorrow morning? Before I state them, I wish to say that they are not questions and answers that can be developed in twenty-four hours. They are the result of years of our growth in our democracy. More than that, they are questions and answers that existed long before the form of American democracy came into being. They simply come from life and from the way of living.

We young Americans must ask, as we go to teach, to fight, and to do a hundred other tasks—what is this democracy into which I was born, in which I have grown, and which I have accepted without question? If we dig down through the accumulated verbiage of numberless decades, we will find that fundamentally it means more than a secret ballot for the greater number, but not all, of our people; more than a representative republic, more than the freedom guaranteed in a constitution. It means, above all, a respect for self that demands that one regard every one of his fellows as a human being possessed with human dignity, with equal rights and privileges; a respect for self that demands that one accept his responsibilities toward society and act intelligently to fill them; a respect for self that demands that one live *in* the spirit of co-operation for the good of all. The rugged individualist would find that his life becomes much more meaningful when he forgets himself in concern for others. Democracy, you know, is a matter of the individual, and not a matter of rugged individualism as it has been known in the past. It rests upon the integrity of the individual to fulfill a duty to himself and to society, the two together and not separately.

If our analysis of the fundamentals of democracy is correct, we may ask ourselves another question: How much do I believe in this democracy? The answers entail a few more questions. Do I believe it enough to act in the fact that every citizen of our counrty, and ultiamtely of the world, deserves the right to equality of privilege, opportunity, and right? Every citizen in my community, in my state, in this nation, and in this world? Or do I consider myself a person of "superior" privilege and station? Am I the snob in my town? Is my town the best in the state? Is my state the best in the nation? Is my nation the best in the world? Is this world the best of all worlds? What are my feelings and my actions in regard to racial minorities, political minorities, or the economically underprivileged? Have I realized the importance of the contributions from every individual, whether he come from the farm, from the mine, the factory, from Main Street, or from Wall Street? If I have, how can I be smug and arrogant among my fellows? These are questions that each must answer for himself, and the answers must come from the heart of him. To say, "Yes, I believe in these things," is not snough. We must strive to be able to say honestly, "Yes, I believe in them so much that they are part of my living."

Why should such a topic as this be the subject of a class-day address in a teachers college in 1942? How is teaching concerned with these things, and how courage? In this way: We will be teaching much more than the subject matter of our narrow fields. If we do not, we shall not be teachers worthy of the name. We, as teachers and as community leaders and workers, are in a strategic position to lead children and adults to an understanding of the potentialities of life—economically, politically, culturally. And such an understanding of these potentialities should go far in a more rapid realization of

(Continued on page 126)

Equipping A High-School Chemistry Laboratory

Robert Ray Bennett

This paper was prepared under the supervision of the Science Department of the Indiana State Teachers College. The article is literally a report on the actual installation and operation of a chemistry course over a period of three years. The paper was written by request because of the high degree of success the author attained. The war effort has brought home the realization that our young people are severely handicapped by a lack of scientific training. It is hoped that in some measure this article will help correct that deficiency.

Many high-school students are denied the privilege and experience of a good course in chemistry. The seriousness of this condition is now being realized by the government and industry. Perhaps part of the blame for the situation can be placed on a gross misconception. Many people are under the impression that the installation of a chemistry department is an extremely expensive process. It costs less to install a chemistry laboratory in a school than it does to buy sufficient maps to offer a good course in history.

This paper is based on experience and is in no way dependent upon guesswork. The laboratory upon which the information is based has been in operation three years and has proved quite satisfactory. It contains only those things which are absolutely necessary to the course. Practically any school system can do the same thing.

In offering such a course as is herein suggested, the ingenuity of the instructor is sometimes tested, particularly when it is necessary to improvise equipment. There are many pieces of equipment which are easily made in the laboratory. Inverted burettes make excellent graduated gas-collecting tubes. An electrolysis apparatus may be prepared by inverting test tubes over small strips of copper sheet. A rather accurate balance can be improvised from a uniform rod or meter stick by using it as it is used in calculating moments of force in every physics class.

Many articles of the apparatus in the order can be eliminated if physics is offered in the school. If a thorough check is made, the physics department will perhaps supply such articles as ringstands, graduates, beakers, and perhaps a balance. A periodic chart of the atoms is a nice piece of equipment, but it is not necessary, since one appears in every text; also, it can be easily made, as may other helpful charts, e. g., electromotive series.

The equipment listed is sufficient for twenty students. The students can not be permitted to have their own desks individually equipped, but it will be necessary for each to obtain only that equipment which he needs and return it when finished. Of course, every student will be allowed to work at his own rate, and within a short time the better students will be ahead, so that the larger, more expensive pieces of equpiment, of which there is usually a limited supply, will be sufficient to care for the class need. Eight or ten Bunsen burners will be sufficient, in that many of the experiments are purely reaction experiments requiring no heat. One or two of the burners should be placed near water taps so as to operate condensers.

Perhaps there are no desks in the school which are suitable for chemistry, but any table will do very nicely, and these tables may be finished with a chemical resistant enamel. The installation of gas is no longer a problem. If the community does not have gas, there is a salesman in the neighborhood who will install the pipes and furish a year's supply of bottled gas for, not to exceed, twenty dollars (June, 1941).

The following is a list of experiments that the high-school student could complete if the suggested chemical and equipment order is used. Time permitting, the instructor will find that simple qualitative analyses are soon mastered by high-school students. The instructor will find that demonstrations are very helpful in the schools with limited supplies and short terms. The experiments which follow are based on the laboratory manual, *Laboratory Experiments In Chemistry*, which is based on the text by Brownlee, Fuller, Hancock, Sohon, and Whitsit (State adopted).

MINIMUM ESSENTIALS OF LABORATORY EXERCISES

1. The effect of heat on metals in air
2. Weight changes on heating metals
3. Decomposition of a compound (mercuric oxide) by heating
4. Preparation of oxygen
5. Formation of oxides (charcoal, phosphorus, sulfur, steel wool)
6. Preparation of hydrogen
7. A study of the properties of hydrogen
8. Distillation
9. Solutions and suspensions
10. Water of crystallization
11. Quantitative replacement of hydrogen
12. Reaction of water with sodium
13. Flame tests
14. Preparation of chlorine
15. A study of the properties of chlorine
16. Preparation of hydrogen chloride and hydrochloric acid
17. Test for a chloride
18. Neutralization
19. A study of bases
20. Determination of concentration by titration
21. Determination of the weight of a liter of oxygen

22. Forms of sulfur
23. Preparation of hydrogen sulfide
24. Preparation of sulfur dioxide
25. A study of sulfuric acid
26. Ions
27. A study of direct combination and simple decomposition
28. Simple replacement
29. Actions go to an end by volatility
30. Actions go to an end by insolubility
31. Preparation of sodium chloride by direct combination, neutralization, formation of an insoluble product, volatility of one of the products
32. Salts that are not neutral
33. Nitrogen
34. Composition of air
35. Preparation and a study of the properties of ammonia
36. Ammonium compounds, preparation and study
37. Nitric oxide and nitrogen peroxide
38. Nitrous oxide
39. Nitric acid
40. Bromine, preparation and study
41. Halogen acids
42. Iodine, preparation and study
43. A study of carbon as a reducer, a decolorizer
44. Carbon dioxide
45. Baking powders
46. Chemical fire extinguisher
47. Carbon monoxide
48. Destructive distillation of coal and wood
49. Colloids
50. Aluminum hydroxide preparation and study
51. Hard waters
52. Water softening
53. Bleaching solutions
54. Preparation of metals by reduction
55. Electro-deposition of metals
56. Physical properties of metals
57. Chemical properties of metals
58. Action of metals on salt solutions
59. Oxidizing a ferrous salt
60. Deoxidation of a ferric salt
61. Tests for iron salts
62. Iron salts in photography, blue prints
63. Testing for chloride and sulfate ions
64. Tests for nitrate, carbonate, sulfite, sulfide ions
65. Borax bead tests
66. Cobalt nitrate tests
67. Qualitative separation of lead silver and mercury
68. Soap making
69. Starch, properties and test

GENERAL APPARATUS

Amount	*Description*
2	Blow pipes, brass, 2 inch
12	Charcoal blocks, 4 x 1 x¾ inches
6	Brushes, test tube, ¾ inch bristle
3	Brushes, small tube, ½ inch bristle
2	Wing tops for Bunsen burner fit your particular type burner
2	Clamps, burette
2	Clamps condenser
10	Clamps, Stoddard's test tube
2	Clamp holders, right angle
2	Clamps, Mohr's, 2¾ inch
1 gross	Corks, assorted 0 to 11
1 set	Cork borers, 4, 6, 7, 8, 9, 10 mm.
3	Evaporating dishes, Coor's porcelain, glazed, 85 mm. diameter
3 pkgs.	Filter paper, 11 cm.
10	Gauze, wire, 6 x 6 inch
2	Mortar and pestle, Coor's porcelain, 135 cc.
2 lb.	Rubber stoppers, assorted
50 ft.	Rubber tubing, 3/16 inch inside, 3/64 inch wall
25 ft.	Rubber tubing, ⅜ inch inside, 1/16 inch wall
3	Ringstands, base 3 x 7 inches, 20 inch rod, 3, 4, and 5 inch rings
3	Crucible tongs, 9 inch
4	Tripods, 8 inches high, 3 inch ring
1 lb.	Asbestos paper, 1/32 inch

GLASSWARE

Amount	*Description*
12	Beakers, 150 cc. pyrex
12	Beakers, 250 cc. pyrex
12	Beakers, 600 cc. pyrex
36	Bottles, wide mouth, 6 ounce
12	Bottles, wide mouth, 4 ounce
2	Condensers, 400 mm. long
24	Bottles, narrow mouth, glass stopper, 4 ounce
2	Burette, 50 cc. capacity, graduated to 0.1 cc.
10	Flasks, flat bottom, boiling, 250 cc.
5	Flasks, flat bottom, boiling, 500 cc.
3	Flasks, Erlenmeyer, pyrex, wide mouth, 250 cc.
6	Funnels, 60 degree, 65 mm. diameter, 65 mm. stem
3	Funnel tubes, thistle top, 40 cm.
2	Graduated cylinders, on foot, 10 cc.
2	Graduated cylinders, on foot, 25 cc.
48	Test tubes, 6 x ¾ inch, plain glass
48	Test tubes, 18 x 150 mm., pyrex
6	Watch glasses, 2½ inch diameter
1 lb.	Glass tubing, 3 mm. outside
2 lb.	Glass tubing, 6 mm. outside
3 lb.	Glass tubing, 7 mm. outside

CHEMICALS

Amount	*Description*	*Source or Common Name*
1 lb.	Acid, acetic, 36%	Vinegar 5%
4 oz.	Acid, boric, crystal	Medicine cabinet, eye wash
1 oz.	Acid, formic, 90%	
12 lb.	Acid, hydrochloric	Hardware store, muriatic acid
7 lb.	Acid, nitric	
8 oz.	Acid, oxalic, crystal	Paint store, wood bleach
9 lb.	Acid, sulfuric	Battery acid
4 oz.	Acid, tartaric, crystal	
1 pt.	Alcohol, ethyl, 95%	Rubbing alcohol
1 pt.	Alcohol, methyl	Alcohol, anti-freeze
1 lb.	Aluminum sulfate	Water works
1 lb.	Aluminum chloride	Sal ammoniac
8 lb.	Ammonium hydroxide	Household ammonia
1 lb.	Ammonium nitrate	
4 oz.	Ammonium sulfate	Seed store, fertilizer
4 oz.	Antimony potassium tartrate	Tartar emetic
1 lb.	Barium chloride	
1 pt.	Benzene	Paint store
1 oz.	Cadmium nitrate	
2 lb.	Calcium carbonate	Limestone
12 oz.	Calcium hypochlorite	Bleaching powder
4 oz.	Calcium nitrate	
3 lb.	Calcium oxide	Quicklime

2 lb.	Calcium sulfate	Plaster of Paris
1 lb.	Calcium bisulfide	Seed store, exterminator
1 lb.	Carbon tetrachloride	Non-inflammable cleaning fluid
1 lb.	Charcoal	Quenched fire
4 oz.	Chromium sulfate	
1 oz.	Cobalt nitrate	
1 lb.	Copper metal, sheet	Scrap copper
1 oz.	Copper (ic) oxide	
1 oz.	Copper (ous) oxide	
4 oz.	Copper (ic) sulfate	Blue vitriol
4 oz.	Fehling's solution A	
4 oz.	Fehling's solution B	
1 oz.	Glass wool	
4 oz.	Iron (ic) ammonium citrate	
4 oz.	Iron (ic) chloride	
8 oz.	Iron (ous) sulfate	Green vitriol, insecticide
1 lb.	Iron (ous) sulfide	
4 oz.	Lead acetate	Sugar of lead
1 oz.	Magnesium ribbon	
1 lb.	Magnesium sulfate	Epsom salts
1½ lb.	Manganese dioxide	
1 oz.	Mercury (ic) nitrate	
1 oz.	Mercury (ous) nitrate	
1 oz.	Phenolphthalein	
1 oz.	Phosphorus, red amorphorus	
1 oz.	Phosphorus, yellow	
4 oz.	Potassium bitartrate	Cream of tartar
8 oz.	Potassium chlorate	Seed store, weed killer
4 oz.	Potassium bromide	
4 oz.	Potassium chromate	
4 oz.	Potassium ferricyanide	
4 oz.	Potassium ferrocyanide	
2 lb.	Potassium hydroxide	
4 oz.	Potassium iodide	
1 lb.	Potassium nitrate	Saltpeter
4 oz.	Potassium permanganate	Permanganate of potash
½ lb.	Potassium sulfate	
4 oz.	Silver nitrate	
½ lb.	Sodium bisulfite	
1 lb.	Sodium carbonate	Washing soda
1 lb.	Sodium hydroxide	Lye
½ lb.	Sodium hyposulfite	
4 oz.	Sodium, metal	
½ lb.	Sodium nitrate	
4 oz.	Sodium peroxide	
½ lb.	Sodium phosphate, dibasic	
½ lb.	Sodium sulfate, crystal	
½ lb.	Starch, corn	
½ lb.	Starch, potato	
8 oz.	Steel wool	Domestic steel wool
1 oz.	Strontium nitrate	
5 lb.	Sulfur, roll	Drug store
½ quire	Litmus paper, red	
½ quire	Litmus paper, blue	
4 oz.	Tin metal, mossy	
1 lb.	Zinc, metal, mossy	
1 lb.	Zinc, metal, sheet	
4 oz.	Zinc nitrate	
8 oz.	Zinc sulfate, crystal	

As was previously stated, the order is sufficient for twenty students. This order was obtained for about one hundred dollars (1940). After a year of chemistry, it will be necessary to make replacements of chemicals and equipment. Unless the class had extremely poor luck with equipment losses, twenty dollars will be sufficient to replace all the articles used and broken. That means that after the laboratory has been installed, it will cost but one dollar per year per student. Therefore, why should any child be denied chemistry when it is so inexpensive?

A Study Of Oriental Affairs In American Schools

Three days before Pearl Harbor the American Council on Education appointed an informal committee to investigate the possibilities for increasing and improving the study of Oriental affairs in American schools. International events which have accentuated the importance of American-Oriental relations in recent months as well as prospects for the emergence of a world order in which East and West must co-operate, have increased the importance to American education of the work on which the Committee is engaged.

The policy of the Committee has been expressed in a statement published in the February issues of the *Education Forum*, *Social Education*, and the *Bulletin* of the National Association of Secondary School Principals. Its plans have been furthered by conferences in Washington, New York, and San Francisco participated in by specialists in Far Eastern studies and specialists in education. It has recently been granted financial aid by the Rockefeller Foundation to carry on a program of work for the coming months.

The present program, which is both exploratory and developmental in nature, is proceeding along three lines. First, a series of conferences for teachers, curriculum directors, and specialists in Eastern studies was held during April and May. Second, a series of pamphlets for teachers and pupils is in preparation. Third, a measure of aid for the development of work in this field is being afforded a group of workshops in education this summer.

Teachers and school officials interested in the increase and improvement of Oriental study as a phase of education for American citizenship, or who can report present activities and promising procedures in this area are urged to write to the Chairman of the Committee at the office of the American Council on Education, 744 Jackson Place, Washington, D. C.

Competencies Aimed At In The Education Of Teachers At Indiana State Teachers College

This report is a sequel of the Wartime Objectives of Indiana State Teachers College, featured in the March issue of the Journal. It was prepared by a committee consisting of Wilbur B. Brookover, Gwylym Isaac, Anne M. Lee, Mary D. Reed, and J. R. Shannon, chairman.

I. Perhaps the foremost, or most observable, competencies which the College should aim at in the education of prospective teachers fall under the heading of general culture, which means depth and breadth of interest, information, and sympathy, to the end that each teacher live a personally satisfying and socially useful life. The evidences of general culture accepted by the College as being primal are:

A. A consciously formulated, consistent, workable philosophy of life.

B. Such broad general knowledge that each teacher will command respect of pupils, other teachers, and other scholars, and be able to see above the routine of daily work.

C. Such broad interest that a teacher does not need to always "talk shop."

D. Ability to express one's self in speech or writing in effective style and correct form.

E. A command of the fundamental tools of learning.

F. A habit of keeping reasonably well informed on current affairs in the world, our nation, and the teacher's own state, community, and school.

G. A competence to make intelligent decisions with regard to social, economic, political, and other contemporary problems in accord with the democratic concept of mutual respect and understanding.

H. An understanding of the methods and techniques of acquiring information.

I. At least one wholesome and consuming hobby.

J. Aesthetic sense.

II. Competencies following under the heading of knowing everything about something, are the next-most obvious ones which the College should expect to engender. They include:

A. Mastery of subject matter taught, such as to command respect of pupils, other teachers, and other scholars.

B. Full understanding of the relationships and border lines between a teacher's major subject and other fields of knowledge.

C. Special knowledge sufficient for the successful sponsoring of at least two extracurriculum activities.

D. The habit of keeping abreast of developments in one's special field, and of helping produce such developments.

E. An understanding of the methods techniques of research.

III. The peculiar function of a teachers college might be conceded to be the inculation of competencies needed particularly by teachers, and which often are called *professional*. The major ones of these are:

A. A consciously formulated, consistent, and workable philosophy of education which reconciles the dualism of educational values to the individual and to society.

B. An understanding of human nature, particularly at the age level of childhood or adolescence where the teacher's assignment falls.

C. Knowledge and judgment in selecting teaching materials, particularly in selecting materials in local resources, in light of their educational significance and in light of pupil needs, abilities, and stages of development.

D. Knowledge and judgment in organizing subject matter according to pupils' readiness.

E. Knowledge of teaching procedures, and skill in the technique of using each.

F. Knowledge of standards and procedures in classroom management and discipline, and skill in the technique of using the procedures.

G. Knowledge of standards, devices, and procedures in measuring the results of teaching, and skill in the technique of measurement.

H. Ingenuity in adapting modern theories to practical applications.

I. Knowledge, judment, and skill in exploring individual pupils' interests and aptitudes, and in counseling them in all aspects of life.

J. The habit of careful planning of one's work, harmonizing materials, methods, and purposes.

K. A group of competencies which fall under what might be called *professional mindedness*. The chief ones are:

1. Full appreciation of the worth and dignity of the teacher's calling, and an enthusiasm for advancing in it.

2. Knowledge of education and of school organization sufficient to fit one harmoniously into the machinery of the teaching profession and to enable him to work for its improvement.

3. A felling of professional solidarity.

4. A zeal for co-operative action with fellow teachers, school administrators, and other educational agencies.

5. The habit of keeping abreast of developments in education, and of helping further such developments.

6. Everlasting self-vigilance for purposes of self-improvement.

IV. A fully competent teacher is motivated by the ideal of the greatest happiness for the largest number of people in the long run. This necessitates a thorough-going belief in the democratic way of life, and is manifested particularly in the following civic or social applications:

A. Ability and desire to achieve the fullest possible self realization within the bounds of social acceptance.

B. Ability and desire to influence others to think and act in ways destined to contribute toward the well-being of all, recognizing all the while, however, the slow rate at which society can be led to accept new ideas

and behavior patterns.

C. A love of people and of being with people.

D. Pleasant and intelligent conversational ability.

E. Ability and desire to fit into the community happily and feel at home there.

F. Ability and desire to co-operate in wholesome community enterprises.

G. Such cleanliness, propriety, and sobriety of appearance and conduct as not to become conspicuous therefor.

H. Ability and willingness to interpret the school to the community.

V. The competencies listed thus far pertain chiefly to what the teacher *knows* or *does*. There remain a considerable number of competencies which pertain to what the teacher *is*. Those which are more noticeable or necessary are:

A. Physical health to the extent of being free from the handicaps of loss of time or effectiveness in the dispatch of the duties of a teacher and of a citizen, and a body of habits and repertory of activities which will enable the teacher to maintain such a status.

B. Relative freedom from worry, anxiety, and fruitless nervous tension and emotional conflict.

C. A sympathetic love of children and adolescents, which is manifested by consideration, kindness, helpfulness, and patience toward them, and which is enhanced by a vivid memory of one's own childhood and youth, particularly the emotional experiences of those earlier years.

D. Common sense, particularly in the observance of proprieties, in judgment with respect to one's own points of strength and weakness in relation to what he should undertake, and in ability to distinguish between truth on the one hand and wishes, prejudices, fads, and fancies on the other.

E. Modest self-confidence and freedom from timidity and fear.

F. Sufficient initiative, forcefulness, resourcefulness, and industriousness to get things done.

G. The habit of taking one's work seriously without taking one's self too seriously.

H. An attitude of open-minded inquiry, susceptibility to new truth, and tolerance toward well-intentioned opinions.

I. A voice that is clear, convincing, and pleasing.

J. Moral courage.

The Courage

(Continued from page 121)

them. If we believe—and live and work as we believe—in the fundamental simplicities of democracy, we can be the bearers of a precious heritage to all whom we will meet in the next forty or fifty years.

This is no easy task. Its performance requires the courage, the grit, and the endurance of a soldier. Before anything else, we need the courage to take our lives, as they are now, into the world of doing, and say: "This is the stuff I am. Mixed in it are the things I have learned, the beliefs I have held, to help make of me a better person, to help to make a better world. It is yours as well as mine. Together we will use it to the best that is in us both." If we have not the courage to say that tomorrow, or today, or any day, then we are false to the spirit that sent us here, and that built this institution in the first place.

Ignorance breeds fear—thus knowledge should breed courage. Yet sometimes it takes courage to know. How are we to know? We shall know by daring to tear the veils from institutions and organizations; by getting behind the platitudes that men find convenient substitutes for creative thought; by asking "why" and "how" and "for what" of everything; by investigating the labels that words and people wear; by destroying the barriers of indifference, shallow sophistication, and selfishness that people erect among themselves.

And when we know—what follows? If we know, and do nothing, we are false. Knowledge holds within it a compulsion to act intelligently upon the basis of that knowledge. So—our job will have just begun. We will have need for greater courage to use what we know—courage to dare to be fair, to be just, to be honest; to dare to make mistakes, admit them, and to begin again; courage to challenge the slightest manifestation of undemocratic tendencies. Greater still is the courage we will need to resist the easier ways of force, of compromise, of convenience, of convention; the easier ways of complacency and comfort, and of slow intellectual decay as the years roll on and we become tired and disillusioned.

When we become associated with institutions of any nature, but especially those of learning—grades, high schools, teachers colleges, universities—we must have the courage to keep the energies of those institutions centered upon satisfying the vital needs of men. The institution that fails to meet those needs is headed for a just oblivion.

The path that we would take is often not a pleasant one. It is a lonely one, for not many people walk that way. People as a whole still resent the fellow who prods them to greater achievement. This is so because as yet the people are asleep. Perhaps our vigilance and our efforts will arouse them.

It is quite apparent that teachers are obligated to be courageous in the ways I have named. It is apparent that teachers, first among all others, are obligated to be democratic in belief and in action. They are obligated because they hold within their minds and their hearts the keys to freedom that truth and knowledge—and courage—can bring to all men.

If, tomorrow morning, we can give silent affirmation to a faith in the fundamentals of democracy; if we can find the courage in the hearts of us to live them, to teach them, and to lead others to them, the diplomas will be rightfully placed in no more willing and capable hands than ours.

ILLUSTRIOUS ALUMNI

FISKE ALLEN

Mr. Allen graduated at Indiana State in 1895, and did later work at Indiana University and Columbia University. After teaching in Indianapolis, Horace Mann School, and Kansas State Teachers College, he went to his present position in Eastern Illinois State Teachers College.

Education For Life Or Education As Life

J. R. Shannon

The following article is a stenographic report of a discussion in a class in Principles of Secondary Education taught by the writer at Indiana State Teachers College. The names of the students, as well as their words, are genuine.

Professor: We have given our attention to the history of the high-school curriculum, and to several philosophical considerations relative to the high-school curriculum. Before leaving the philosophical considerations of the curriculum, let us direct our attention to one remaining factor. Assume that this moring you became the parent of child, and that by some mysterious omen you were given information from on High that the child would be a normal, healthy child, both physically and mentally, but would die suddenly on the morning of his eighteenth birthday. What would you do between now and then with that child?

Miss Pulliam: I should have him live life to the fullest during his eighteen years and thereby hope for him to have all the wholesome experiences that people ordinarily enjoy in a full period of three score years and ten.

Mr. Naile: We should not crowd the child too much, because he might become a social misfit.

Miss Conner: I would rear him as a normal child regardless of whether he was going to live or die. He would have to live with other people and get along with them during those eighteen years. He would have to be taught to co-operate. I would not make any exception out of him. We should not try to crowd into the child's life experiences which would be beyond his years. A child can live only so fast.

Miss Pulliam: My point is that we should allow him all advantages he would be able to have during the eighteen years so that he could enjoy life to the fullest. Give him the advantages of education, social life, and experience with other people. Make him feel that he had really lived his life to the fullest extent. Give him advantages which he would have if he were a little older. He probably wouldn't seek marriage at his age.

Mr. Allen: I agree with Miss Conner. Let the child alone. I should think the normal life would be happiest anyway. I should make certain that the child not be allowed to know of his untimely death, however.

Mr. Crawford: Mr. Allen is not looking far enough into the future. We should think of the child's happiness in the hereafter. I should tell the child of his impending death as soon as he became old enough to understand. Thereby he would be able to prepare himself for eternity.

Mr. Sevier: Wouldn't Mr. Crawford's point come in as a part of the normal experience which Miss Conner and Mr. Allen have advocated?

Mr. Van Horn: There is no necessity for treating the child differently. We never know when we are going to die. None of us know anyhow.

Miss Schmidt: If one lives the kind of a life he ought to anyway he will not need to think about the hereafter. It will take care of itself. As Socrates said, "No harm can befall a good man."

Mr. Cramer: If we live each day as if it were the last, and work each day as if we were going to live a hundred years, we will not have to worry about eternity.

Mr. Wegrich: I should want my child to have as good a time on earth as possible because eternity is very uncertain.

Mr. Krieble: That's my sentiment. Let the child do as he pleases.

Professor: Do you intend to imply that you would permit the child indulgence not ordinarily allowed?

Mr. Voight: I think I should let him do just about what he chooses except where it would be detrimental to some one else. After all, he would know best what would please him.

Mr. Warner: The point of view expressed by the last three gentlemen impresses me as being a bit extreme. I recommend that we not go the length of indulgence, but that we study the child to determine his peculiar interests, and then develop these.

Mr. Naile: You would not have time to see where his interests really lie, because he will be only eighteen when he dies, and his interests will change many times.

Mr. Warner: Mr. Naile's point does not constitute a valid objection. The interests of a child at ten are not the same as the ones he may have at eighteen. I admit, and even at eighteen his interests will not be crystallized, but what other guide have we? Dewey says education is a reconstructing of experience.

Miss Rockstroh: Mr. Warner may be right about building around one's interests, but would that not lead to a very narrow type of experience?

Mr. Warner: Not necessarily. Let us use the child's interests as a "bridge to culture," as Felix Adler puts it, and as it is being practiced in the Fieldston School in New York. This would be a plan of individualizing instruction on the project basis.

Miss Ralston: If one child of a family would be allowed to follow his own interests and live differently than the rest of the family, the other children would want to also. One child should not be given advantages above the others.

Mr. Warner: I agree fully with Miss Ralston's last sentence. The plan of building around a child's interests as a "bridge to culture" does not imply that other children should not receive their instruction in the same manner.

Let us improve instruction for all by this method.

Mrs. Hannah: Throughout Mr. Warner's remarks he keeps using the word "instruction." Why give this child instruction if he is going to die at eighteen? I do not think it necessary to give the child a formal education, because he can get this by traveling —that is, if he could be happy that way. After all, an education is preparation for living, and he is not going to live.

Mr. Richardson: The only thing that is wrong with Mrs. Hannah's argument is that the child will be living all the time, and he would not be happy if he were not treated like other children.

Mrs. Hannah: The child is an individual. Whatever we do should be with the idea that we are doing it for the child's good. So if he has only eighteen years to live, let him live his own life. Children have more sense than we give them credit for having. They aren't so dumb.

Professor: Are there any other points of view? If not, let us change the setting. Whatever you have decided to do, we'll assume that you have done, and that you have acted according to your best judgment for the predetermined eighteen years. The sun rises eighteen years hence, and there is a great clap of thunder and a voice which says: "There was a mistake some place. Your child isn't going to be taken today. He will live until he is eighty." Then would you regret what you did in any case?

As different ones of you expressed yourselves I noted briefly on the blackboard the substance of the different proposals. According to my analysis there are six dfiferent ideas: (1) Try to crowd the experiences of a long life into a few years; (2) Treat this child the same as any other; (3) Prepare the child's soul for eternity; (4) Let the child have a good time; (5) Cultivate the child's interests; (6) Abandon formal education, since education is preparation for adult life. Now let us revaluate these alternatives in light of the child's prospect of living until a ripe old age.

Mr. Crawford: Perhaps my plan of placing major stress on preparation for eternity would not be so wise under the changed conditions.

Mr. Naile: In preparing the child for eternity you are making that the principal thing. It seems that this would make the child too religious-minded for his or other people's best interests on earth.

Miss Samide: Mr. Crawford is too willing to surrender his original position. I agree with Mr. Naile that it should not be major, but all through life it is well to consider the hereafter, in case there be such. To do so, though, one does not have to abandon interest in the present life. If one lives the present life as it should be lived for its own sake, that will be the best preparation for a future life, if there is one. There should be no difference; we cannot separate the here from the hereafter. Mr. Van Horn hit the nail on the head a while ago when he said that in actual life none of us know when our time is to come, so let us educate all children for the maximum of happiness on earth and thereby gain the maximum of happiness in any future life that may be in store for us.

Mr. Wegrich: I probably was wrong when I set a good time as the principal objective for the child when I thought he would die at eighteen, but at that I was no farther wrong than if I had gone to the opposite extreme and abandoned all prospect of complete living now so as to prepare for it in the sweet by and by.

Miss Conner: Hasn't Miss Samide's eloquent appeal pretty well taken care of Mrs. Hannah's contention that we abandon formal education on the ground that it is a preparation for adult life? If a child is normal and happy as a child, he probably will be so as an adult also. Paul said when he was a child he thought and acted as a child, but that when he became a man he put away childish things. He did not rebuke childhood or imply that it was merely a training ground for adulthood. Bobbitt summarized my point of view nicely by saying, "The momentum gained from holding the present high is preparation for the future."

Mr. Warner: Now it's my turn. Haven't both Miss Samide and Miss Conner reinforced my point of view in regard to building around the child's interests as a "bridge to culture"? They said nothing about my ideas on the project method or on extending this same wise guidance to all pupils, but I believe they would agree with them.

Professor: I agree that the ideas of Miss Conner and Mr. Warner are complementary and that Miss Samide has argued well for both of them. At the same time she gave rather damaging argument against the proposals by Mr. Crawford, Mrs. Hannah and Mr. Wegrich. Now, how about the remaining one of the six proposals, the one by Miss Pulliam to the effect that we try to crowd into eighteen years the normal experience of a much longer period?

Miss Pulliam: I suspect Miss Samide covered that too. If one lives life to the fullest he can't make it any fuller, and if he lives life to the fullest, he is doing the wisest thing whether he lives to be eighteen or eighty.

ILLUSTRIOUS ALUMNI

Henry Wallace Stopher

Dr. Stopher was born at Harlan, Indiana, and graduated at Indiana State in 1906. While a student in the old "State Normal" he was a member of the football, baseball, and track teams, and served a year as editor in chief of the *Advance*, which was the forerunner of both the present *Statesman* and *Sycamore*. Before going to Louisiana to begin college teaching, he taught in the public schools of Indiana at Grass Creek, Cuba, Brazil, Harlan, Delphi, and Noblesville. His first position in Louisiana was in the State Normal School at Natchitoches, but for the past twenty-seven years he has been at Louisiana State University, where he is professor and director of the school of music.

Last January Dr. Stopher returned to his Alma Mater to give the principal address at the annual Foundation Day exercises. He lingered a few days, staying over for a college basketball game, at which he acted as guest director of the band.

Abstracts Of Unpublished Masters' Theses

Indiana State Teachers College 1941-1942

Each July issue of the Journal features the report of Masters' theses completed during the year. The report in 1941 extended through thesis number 430, but since a few digests failed to get included at that time they are being published now even though out of order.

BERRYMAN, STALEY. *A Handbook of Printing Information for Journalism Teachers.* 129 pp. (No. 441).

PROBLEM. The problem was to determine the printing topics which should be described in a handbook of printing information for journalism teachers and then to describe each topic, thus providing information on pertinent printing topics not found in existing books on journalism.

METHOD. First, a basic list of printing topics was prepared by the writer, a printing teacher, and submitted to fifteen other printing teachers who were active in producing school newspapers for additional topics. The revised list thus obtained was submitted to fifteen journalism teachers for evaluation and additional topics.

FINDINGS. Fifty topics were obtained and evaluated. The bulk of the thesis is devoted to descriptions of these topics. This section constitutes the handbook.

WENDHOLT, CHARLES D. *Trends of School Administration Costs in Indiana Over a Ten Year Period—1929-1938.* 91 pp. (No. 445).

PROBLEM. The purpose of this study is to show: (1) what trends exist in operating public secondary schools in Indiana; (2) a comparison of larger cities and towns with smaller cities and towns as to costs of operation; (3) a comparison of the township schools as to relative costs of operation; (4) what significant relationships exist, if any, in the cost of operating the various schools.

METHOD. Data were secured from the office of the Superintendent of Public Instruction at Indianapolis for the functional costs as itemized in the Superintendent's Annual Report.

FINDINGS. Township and town and city schools decreased expenditures for functional items between 1929 and 1934, and, in general, increased them from 1934 to 1938. Town and city schools increased operating and total expenditures between 1934 and 1938 to almost the 1929 level, but township schools were still below.

TITTLE, THELMA. *A Handbook for Teachers of Special Education.* 133 pp. (No. 446).

PROBLEM. The writer attempted in this thesis to prepare for teachers and administrators who are interested in the education of subnormal pupils a handbook of practical, helpful, concise, and usable information.

METHOD. Published materials and the writer's experience were the sources of material compiled in the handbook. The thesis, therefore, is not so much a research as a compilation.

FINDINGS. The handbook itself constitutes the major part of the thesis. This is organized under the following headings: characteristics of slow-learning, retarded, and dull children; objectives in the education of such children; reasons for having special classes for them; principles of organization and control of special classes; classroom environment and equipment; curriculum; outline for programs; health discussion and practice; choral reading; help and supervision; reading; arithmetic; manual and vocational training; the teacher.

ELLIOTT, ERNEST. *An Analysis of the Curriculum Needs of Sullivan High School as Interpreted by the Graduates from 1930 to 1939.* 126 pp. (No. 449).

PROBLEM. This study was undertaken to find out the occupations and professions which the graduates of Sullivan High School, Sullivan, Indiana, were following; the subjects which benefitted them most; the subjects which the graduates would have studied had they been offered; and the adequacy with which the high-school curriculums met the needs of the student population at the time of this study.

METHOD. Questionnaires were sent to the students graduating from Sullivan High School from 1930 to 1939. The questionnaires were analyzed for 209 boys and 212 girls.

FINDINGS. During the years 1930-1939, 68 per cent of the boys enrolled and 66 per cent of the girls enrolled graduated from the Sullivan High School. Approximately 17 per cent of the boys and 18 per cent of the girls dropped out of school on account of work or failure.

It was found that 22 per cent of the boys and 20 per cent of the girls continued their education upon graduation from high school.

At the time of this study 37 per cent of the girls graduated were domestically employed; 32 per cent of all the girls graduated were married in 1940 and had become homemakers.

Of the graduates, 72 per cent of the boys and 59 per cent of the girls graduated on the academic curriculum. Of this group only 33 per cent attended colleges or universities.

Ninety-three per cent of the boys graduating on the commercial curriculum were employed in business or some kind of related work.

A study of the occupational survey revealed that 22 per cent of the boys returned to the farm, and approximately 22 per cent of the graduates were employed in factories or manufacturing concerns of various kinds.

The data showed that stenographers made up a fairly large group of employees, being represented by approximately 40 per cent. Over 13 per cent of the employed population were engaged in selling through retail stores.

Six per cent of all the graduates were unemployed at the time of this study.

FRAZIER, LAURA BIGHAM. *A Study of the Causes of Failures in Grades Nine to Twelve in Five Negro High Schools of Kentucky for the School Years 1936-1940.* 74 pp. (No. 451).

PROBLEM. This study was undertaken with a three-fold purpose: first, to find the causes of the failures of pupils; second, to compile these causes in such a manner that careful analysis might be made and certain generalizations reached which would be of value to teachers and supervisors in making a diagnosis for corrective and remedial work and for guidance in teaching future classes in these subjects in which the pupils failed; and third, to offer suggestive remedial measures for similar cases of failures.

METHOD. The questionnaire method was used. Before the questionnaires were given out, the writer personally secured from the records of the schools studied the following information: (a) the names of all pupils in grades nine to twelve, inclusive, who had failed in one or more subjects during the scholastic years 1936-1940; (b) list of the subjects in which these pupils had failed; (c) the semester and year in which each failure was made; and (d) the health records of these pupils who had failed. A Pressey Senior Classification Test was given to each pupil in all high schools regardless of whether or not he had failed. Three questionnaires were used; namely, one for the pupils who had failed, one for the teachers under whom these pupils had failed, and one for the parents of these pupils who had failed.

FINDING: There were more failures in mathematics and English than in any other subjects.

Failures in the vocational subjects were fewer than those in the academic ones.

More boys failed than girls.

Eighty-four of the 181 pupils worked.

All fathers except three were non-professional workers. Not one mother was a member of the professional group.

Education of the parents was limited.

The best magazines were not read in the majority of the homes.

Pupils did not dislike teachers who failed them. Parents retained a favorable, cooperative attitude toward the teacher in whose class their children failed.

Teachers analyzed their teaching methods when pupils failed in their classes.

Ninety-six, or 53 per cent, of the pupils who failed had poor health.

From data colleceted the following were found to be the main causes of failures:

Reading difficulties on the part of the pupils.

Irregular attendance caused in part by poor health.

Lack of proper reading materials.

Lack of cultural background due in part to certain home conditions, such as, lack of one or both parents in the home, lack of parental education, and lack of financial security.

Lack of study on the part of the pupil.

Too much outside work engaged in by the pupils.

Too many extra-curricular activities participated in by the pupils.

DANIELS, EVERETT L. *An Anlysis of Weaknesses of School Bus Drivers in Indiana.* 44 pp. (No. 452).

PROBLEM. The problem of this study was to make an analysis of the weaknesses of school bus drivers in the state of Indiana. From this study, a curriculum could be set up for the training of the drivers to make them more efficient.

METHOD. The data for the making of this study were obtained by questionnaire and personal interview with the principals of consolidated schools where buses are used to transport pupils to and from school. Two hundred and twenty-five letters and questionnaires were mailed to these principals, chosen from all the counties of Indiana. This was done to have a fair sampling from all parts of the state. The personal-interview method with principals was used mostly in the central portion and to some extent in the northern part of the state.

One hundred and sixty-seven replies were received from the 225 letters sent. They contained data on 1,160 bus drivers throughout the state of Indiana. The personal interview method obtained information on 193 bus drivers throughout central and nothern Indiana.

FINDINGS. The questionnaire listed thirteen traits which the author felt were necessary for a good bus driver. The principals were asked to rate his drivers as superior, average, or weak. Additional questions were asked for their opinions concerning age limits, women drivers, teachers as drivers, and the number of accidents in the past five years due to these qualities.

The general trend was that the greater per cent of the bus drivers were rated average by school principals. On the weak ratings, some knowledge of first aid, health habits, discipline, and personal appearance, in order of importance, received the higher percentages.

The number of accidents due to these traits tended to show that physical defects were responsible for the greater portion of accidents.

The opinion on age limits for drivers varied more on the maximum age limit than on the minimum, probably owing to the fact, as stated in the comments, that a person's efficiency or physical fitness may vary because of health or health habits.

The data showed a definite opinion against women drivers, for it was thought of as a man's job to possess mechanical ability and physical strength to handle a bus with ease and to maintain proper decorum.

Teachers as drivers did not meet the approval of principals, because it was thought that teaching was a job within itself. The public in general would not consent, for it would be reducing the number of jobs.

The findings showed the need of a course of instruction for bus drivers. Recommendations for a course of instruction for school bus drivers were made upon the findings of the study.

GOODMAN, JERE O. *A Follow-Up Study of the Graduates of the Laboratory School of Indiana State Teachers College.* 71 pp. (No. 453).

PROBLEM. This study was made in order to associate the present school curriculum with results shown by a report from the graduates themselves concerning their status following high-school graduation.

METHOD. Graduates of the Laboratory School, represented over a five-year period from 1935-1940, which also inculded all graduates during the school's history, were chosen for this study. Because of the fact that the history of the school represents only a five-year period, all graduates were chosen in order to get a representation from those who had finished college and entered vocational careers, as well as from the graduates who were still in college or were attempting to adjust themselves in a permanent vocation. There were 217 graduates in this period of years. A questionnaire, accompanied by a letter signed by the principal, was mailed to each of the graduates from the principal's office at the Laboratory School. Responses were received from 105 of the graduates, which represent approximately 48.4 per cent of the total number graduated.

FINDINGS. Most of the graduates were residing in their parental homes. Several graduates who were not actually residing with their parents were still under the jurisdiction of their parents and were trying to finish their college or advanced training in preparation for their vocational life.

A majority of the graduates realized the importance of advanced education. Those who had not graduated from college expected to overcome temporary handicaps and do so in the future. In regard to the value of their high-school subjects, it was found that English, mathematics, and science rated highest with the men. The women also rated English first with economics second and social studies third.

Most of the graduates stated that their present education had proved a great help in earning a living.

Vocational guidance was the most common need of the graduates. Thirty-three of the men and thirty-five of the women stated that they needed more education of a general character.

Finances was the most common economic condition upsetting the educational plans of the graduates; however, most of the graduates claimed that they had definite plans for further education.

Very little significance can be attached to the data relating to the employments of the graduates in respect to their life work, as most of their present jobs were merely stepping stones to further their education.

The health record of the graduates was excellent. Only four graduates of each sex reported physical defects that limited their vocational opportunities.

The social clubs of both sexes were mostly the type to be found in connection with college life.

Musical comedy was the choice type of moving picture by a majority of the graduates including both sexes. Spencer Tracey and Bette Davis were their choice movie stars.

Dance music was the choice radio program of both the men and women graduates.

Such magazines as *Life, American, Click, Cosmopolitan, Good Housekeeping, Ladies Home Journal, Look,* and *Liberty* were read by the greates' number of graduates.

Many of the hobbies of the graduates were of an educational nature, and none of those listed by either sex could be considered undesirable.

The tarvel, as represented by the graduates, included most of the states, the District of Columbia, Mexico, Europe, and Africa.

Education and making more money were the personal problems of the greatest number of graduates.

RUSSELL, GEORGE L. *Financial Support of the Gary Public Schools. A Comparative Study of the Financial Support of the Ten Largest Cities in the State of Indiana Over the Ten Year Period from 1930 to 1940.* 78 pp. (No. 454).

PROBLEM. This study dealt with the financial support of the schools in the ten largest cities of Indiana over the ten year period from 1930 to 1940. The purpose was (1) to discover where the Gary Public Schools stood in relation to the other nine largest city school systems in the state and (2) to find out some effects of the reduced income each year on the Gary Public Schools.

METHOD. The writer collected his data from the Annual Reports of City Superintendents on file in the office of the State Superintendent of Public Instruction in the State House at Indianapolis, Indiana. The data dealing with Gary's Saturday and Summer Schools were obtained from office files of the Director of Saturday and Summer Schools in Gary, Indiana.

FINDINGS. When the data on total school costs were analyzed, it was found that generally during the ten-year period the northern Indiana city schools had higher costs than the central and southern Indiana city schools.

All the ten school systems showed the effects of the depression and for the most part have not quite reached the pre-depression levels.

The ten school systems studied have been gradually losing their proper share of the total tax income. In 1931-32, Gary schools received 40.2 per cent of the total rate levied. By 1939-40, Gary received only 31.9 per cent of the raet levied. Other schools showed a similar trend.

Gary's per-pupil-enrolled total cost dropped from third place in 1931-32 to sixth place in 1933-34, then to seventh place in 1935-36. Gary rose to third place in 1937-38 and again dropped to seventh place in 1939-40. This indicates that Gary should have an increase in either the tax rate or assessed valuations, or perhaps both.

Gary's administration costs in comparison with the other cities were high.

Gary ranked second in instruction costs during 1931-32 and seventh in 1939-40.

Gary's operation costs dropped from from fifth place in 1932-33 and to sixth place in 1939-40.

Maintenance costs of Gary rose from second place in 1931-32 to first place in 1939-40. This shows that Gary is paying highly for maintenance of her public schools.

Gary's fixed charges were the highest in the State because of the necessity of long-time bonding during the rapid growth of the city in the last twenty years.

There has been an average increase in high-school enrollment of 73.4 per cent. Gary's increase was 45.1 per cent.

The possible economy from a Saturday school during 1939-40 was $59.377; this does not consider savings to children which cannot be measured with money.

Gary's summer school, too, has contributed to pupil welfare and school economy.

Roney, Claud Horace. *Some Investigations in the Teaching of Junior High School Mathematics During the Past Decade.* 133 pp. (No. 455).

Problem. A collection, organization, and presentation of materials bearing on the teaching of junior-high-school mathematics was the purpose of this thesis.

Method. The library method was used. Although some consideration was given to periodical literature, the chief source of material was unpublished Masters' theses and published Doctors' theses.

Findings. Twenty-five studies were digested, and they are summarized under the following heading: curriculum, subject-matter content, objectives, methods, grouping, prognosis, and summary.

Lautenschlager, Harley M. *Improving the Teaching of Reading in the Sixth Grade of a Rural Consolidated School.* 54 pp. (No. 456).

Problem. It was the purpose of this study to find the best methods to use in the sixth grade of a rural school for (1) developing a reading program which includes provision for building essential reading skills, (2) creating the desire to read both for self-improvement and as a leisure-time activity, and (3) providing for remedial instruction.

Method. The data were collected from from forty sixth-grade pupils in the consolidated shcool at Staunton, Indiana. The plan of procedure was to give one form of a reading test at the beginning of the experiment, and then five months later give another form of the same test in order that progress might be measured. The program of instruction included testing, providing reading materials, dividing the class into groups better to meet individual needs, developing skills of work-type reading, and providing free reading.

Findings. According to the Otis Group Intelligence Scale, the median I. Q. of the class was 103, with five pupils having an I. Q. of 85 or less. The reading ability of the class increased from a median grade equivalent of 5.1 on Form Am of the Iowa Silent eading Test to a median grade equivalent of 6.8 on Form Bm of the same test given five months later. The median number of supplementary books read was 21.5. There was found to be a positive correlarelation between the amount of gain made on the reading test and each of the following: (1) mental age, (2) intelligence quotient, (3) number of supplementary books read, and (4) the number of special reports given in class.

Through a careful analysis of the data it was found that:

The ability of the pupils to use the fundamental silent reading skills was greatly increased in a relatively short period of time through an instructional program of techniques designed to develop the skills, followed by abundant practice in using the skills in meaningful situations.

The reading ability of the pupils was improved by wide reading and by giving special reports.

Providing periods for free reading encouraged wide reading, and developed the habit of reading for enjoyment during leisure time.

Grouping pupils within a class according to ability and achievement was advantageous in offering instruction and providing materials to meet individual needs.

Working individually with members of the remedial group, providing them with work in which they could succeed, and furnishing concrete evidence of their progress greatly improved their reading ability, as well as their attitude toward school and general outlook on life.

Providing materials on the level of each child promoted individual growth in reading ability.

Measuring progress in reading ability by using standardized tests aroused the enthusiasm of the pupils for learning to read.

Howard, Anna S. *Emotional Disturbances of Children Which Interfere With Normal Adjustments—Specific Problems of Worry.* 47 pp. (No. 457).

Problem. The purpose of this study was to determine the extent to which children suffer from feelings of anxiety and to determine the specific problems with which they cannot cope. A secondary problem was the evaluation of procedures in this field of investigation.

Method. By means of the disguised method of approach, the seventh and eighth graders of the Rankin Junior High School, Terre Haute, Indiana, revealed disturbances that existed in their lives, when they listed their wishes and prayers and described their future ten years later. Dreams were considered as a source of data, but an insufficient number was collected to warrant their evaluation.

Steps of procedure were the classification and the calculation of a percentage rate table of the pupils' responses to their wishes and prayers; the interpretation of the data for worries, which were classified and a percentage rate table computed; a cross study of the sources of data; the construction of an anxiety inventory; the administration of the inventory to the Thornton and Rankin pupils; the comparison of the rank orders of the items of worry; the computation of fourteen coefficients of correlation.

FINDINGS.

I. *Wishes.* "School" and "family" problems were the greatest concern to both sexes as revelaed by a study of their wishes.

II. *Prayers.* "Family and "civic" problems were the greatest worries of the boys; however, the girls were most troubled about "school" and "family" problems.

III. *Cross Study of the Sources of Data.* A larger number of items of worry was common to wishes and prayers than were other items of desire. The vocational objective, which appeared to be deep-seated, was common to wishes and future more than it was to prayers and future.

IV. *Anxiety Inventory.* "Civic" items of worry, "the war were over," "the world were at peace," and "the United States will not enter the war" ranked first, second, and third places, respectively, with one exception, that the boys of Thornton were more troubled about "making better grades," which ranked first place.

1. *Specific problems of worry:*

a. *School.* The boys were most troubled about "making better grades," "being able to get certain subjects better," and "failing a test," and also were the girls except that the second and third items were reversed in their rank orders.

b. *Family.* Items troubling the Thornton and Ranklin pupils were "Father won't have to go to war" and "the family's health would improve."

c. *Religion.* Girls were more concerned about religious problems than were the boys.

d. *Recreation.* The item "to take a vacation this summer" ranked relatively high for both groups.

e. *Social.* The item, "the poor people had sufficient food or clothing," shared distinctive rank with "civic" and "school" problems.

f. *Economic.* Both groups were equally anxious about "getting a dependable job when I am older." Rankin pupils worried more than the Thornton pupils about "our debts were all paid" and "Father or Mother losing their job."

g. *Civic.* "Civic" problems of worry ranked highest.

h. *Vocational.* The vocational problem, which was significant to both groups, had higher rank for Thornton pupils.

i. *Personal.* The groups were more concerned about "to be successful in my life's work" and "to be more courteous."

j. *Personal* Health. Boys were more interested in their health than were the girls.

k. *Friendship or Affection.* The boys were more anxious about "to have more friends," "to own a pet," and "to marry a good girl"; likewise, the girls expressed concern about "to have more friends," "never to be friendless," and "to marry a good boy."

l. *Unreasonable.* "Being troubled by the thought of my parents dying" ranked practically the same for both sexes.

V. *Evaluation of the Disguised Method of Approach.* The disguished method of approach appeared to be a superior method. The pupils did not realize that their worries were being investigated and they were not so likely to be influenced or conditioned by a teacher. They were free to use their own initiative and creative ability to express themselves. Since the pupils responded with great spontaneity and frankness, they gave valuable data.

HOLDEN, JOHN W. *A Comparative Survey of the Indiana State Teachers' Association.* 79 pp. (No. 458).

PROBLEM. A study of the Indiana State Teachers' Association was made in an effort to determine its elements of weakness for the purpose of securing information in order to formulate a set of constructive suggestions and recommendations which will be presented to the personnel of the Indiana State Teachers' Association.

METHOD. Information that was expected to prove of value in the work of the comparison was collected by sending a questionnaire to the executive secretary of each state teachers' association, except Delaware and Nevada (the addresses of those secretaries were unobtainable), and Hawaii. All states except Rhode Island responded in full or in part.

One hundred six Indiana school people, chosen by the executive committee of the Indiana State Teachers' Association, were solicited for suggestions and criticisms of the Indiana Teachers' Association.

Sixty-eight replies were received and the fifty-nine persons who signed their letters were sent copies of a questionnaire, which had been formulated from their remarks. Fifty-three returns were received.

The same questionnaire was submitted to a second group of sixty-five teachers, picked at random from the Indiana School Directry for 1940-1941. The responses made in the fifty replies were used to verify the decisions given by the first group.

FINDINGS. It was shown that the Indiana Association is the most democratic of all the state organizations.

The teachers of Indiana, while not desirous of any major changes in the administration of the State Teachers' Association, felt that the Association could be improved by several minor alterations. These suggestions are:

The teachers should be informed of the resolutions that are to be presented at the business meeting, prior to the convonetion.

Equal representation should be granted to all teachers in the state.

Adequate room should be provided for the more popular sections at the annual meeting.

A committee should be appointed by the Association to work with the State Board of Education to survey textbooks.

Unimportant committee reports should be eliminated from the annual business meeting and published in *The Indiana Teacher.*

The Association should become more actively interested in the retirement fund.

Harmony between teachers and hiring officials should be promoted by the Association.

The Friday evening session of the convention should be limited to one speaker of national repute.

The Association should give the

National Education Association greater moral support.

The Defense Committee's activities should be continued.

CONLIN, FRANK D. *A Study of the Factors Which Influence the Outside Activities of Boys of the Covington Schools from Fourth to Eighth Grades, Inclusive, and of the Time Spent in Each of the Different Activities.* 196 pp. (No. 459).

PROBLEM. This study was made in order to determine the following points: first, in what outside activities the boys in each of the different grades were participating; and second, the environmental conditions which might tend to influence the amount of time spent in each of these activtities.

METHOD. The material for this study was obtained through a general questionnaire which concerned environmental conditions, and a daily questionnaire which concerned the amount of time spent in health, recreational, and work activities. New copies of the daily questionnaire were given to the teachers in charge of the various home rooms each Monday morning, and they were held responsible for them. These were passed out daily to the sampling of 105 boys from fourth to eighth grades, and collected again at the close of the period by the homeroom teacher. These were collected and the results were tabulated at the close of each week for a period of fifteen weeks.

FINDINGS.

Miscellaneous from general questionnaire.—Of total number of fathers, 23.81 per cent were engaged in farming. Fathers engaged in W. P. A. projects were 17.14 per cent of the total number. Of the mothers, 74.29 per cent do only their own housework.

Only 33 boys were members of any social organizations.

Homes having from 4 to 10 rooms were 86.7 per cent of total number.

Seventh grade has largest per cent of boys to attend moving pictures weekly.

More than 75 per cent of boys had radios in their homes.

Kinds of radio programs enjoyed, in order of their popularity, were: (1) western plays, (2) plays in which leading character was boy, and (3) programs which were humorous.

Kinds of moving pictures enjoyed, in order of their popularity were: (1) adventure, (2) comedy, and (3) love story.

Kinds of reading material enjoyed in order of their popularity, were: (1 book of adventure, (2) Big-Little-Book, and (3) funny paper.

Slightly more than half of the boys attended Sunday school regularly and 5 had never attended.

Aviation and farming were the two occupations desired by most boys.

There was a gradual increase in gang instinct from fourth to eighth grades.

Health Activities.—More time was devoted to *washing hands and face* than to any other item.

The greatest average amount of time spent in *bathing* was in the sixth grade; the lowest was in the fourth grade.

The eighth grade boys were more particular in health duties which improved outward appearances.

The fifth spent no time in visiting doctor and the seventh spent no time in visiting the dentist.

Work Activities.—Four work activities in which the fourth grade averaged the most time were those requiring very little skill.

The sixth grade averaged more time per boy in 20 activities which require physical ability and skill.

The seventh grade was first to show a decided effort to earn money in a definite activity.

Thirteen activities which averaged most time per boy in the eighth grade required a certain amount of responsibility and physical ability.

Recreational Activities.—*Radio* received the most time per boy in all grades except the fifth in which *reading* received the most time.

Moving picture was among the three items to receive the most time per boy in all grades but the fourth.

In the upper three grades under consideration much more time was devoted to *moving picture* and *radio* than to *reading*.

OFFETT, MORTON F. *The Relation between Speech Defects in Children and the Knowledge, Attitudes, and Socio-Economic Status of Parents.* 81 pp. (No. 460).

PROBLEM. This study was undertaken with the following purposes: first, to ascertain relationships between the condition of speech in children and (1) the educational knowledge of parents, (2) their socio-economic status, and (3) their mental capacity; second, to compare mothers with fathers; third, to classify defective pupils on the bases of (1) age and grade attained, (2) frequency of various disorders, and (3) degree of severity; and, fourth, to ascertain the preference of speech-defective pupils of persons for free, enjoyable conversation and the reasons for their choice.

METHOD. A speech test was administered to all pupils above the third grade in Bruce Elementary and High School, Dyerburg, Tennessee. The parents of those pupils found to be speech-defective were exaimend with a multiple-choice and true-false test constructed by the examiner. Likewise, the homes were rated with a socico-economic check list, also construced by the examined. A jury of five competent judges fixed the values for the gradation of replies to multiple-choice questions.

FINDINGS. Twenty-seven per cent of the pupils tested were found to be speech-defective. A much larger percentage of boys than of girls was found. The voice, articulation, and speech (general effectiveness) of girls were superior to those of boys. For the purpose of free, enjoyable conversation, speech-defective children chose mothers first; then, sisters, and/or brothers, fathers, and other adults. The most frequently recurring reasons for their last choice was a lack of knowledge, interest, or understanding. The most frequenly recurring and most serious defects were oral inaccuracy, organic disturbances due to defective teeth, tongue, or lips, and an abnormally slow rate. The least desirable voices were characterized by the presence of hypoloundness, monotony, or breathiness.

Speech-defective children were generally retarded.

The scores of mothers exceeded those of fathers on the multiple-choice test; converssely, the scores of fathers exceeded those of mothers on the true-false test. Noticeable difference between replies of mothers and of fathers in favor of mothers occurred in questions pertaining to the prevention of jealousy among siblings, attitude toward temper tantrums, and scolding children. Differences in favor of fathers occurred in questions pertaining to methods of punishment for misbehavior, action at time of anger on part of parent, use of baby talk, and awareness of causes for inuresis.

Fathers of speech-defective pupils were believed to be somewhat more intelligent than mothers.

In general, parents of speech-defective children were believed to be noticeably emotional and somewhat neurotic. However, they possessed most nearly adequate knowledge of the desirability of using good English and refraining from quarreling in the presence of children and of praising children for acts approved by parents.

Parents of severely defective children scored appreciably lower than did parents of the group as a whole.

The most significant relationship found was between the condition of speech in children and the educational knowledge of parents. This was expressed in a coefficient of .399.

Bell, Everett R. *The Parents' Attitude Toward Married Women Teachers.* 61 pp. (No. 461).

Problem. This study was undertaken with the view of determining: first, the parent's attitude toward the hiring of married women teachers; second, whether or not envy had anything to do with this attitude.

Method. The questionnaire methods was used to obtain the information used in this study. Questionnaire number one was impersonal in nature. It was written so to get the parents' attitude toward other married women's working. Questionnaire number two was personal. It asked the parent's attitude toward the wives' working outside the home. The questionnaires were sent to principals in all parts of the state. The principals were asked to distribute them among the parents of the children in the fifth and sixth grades.

Findings. The mothers and fathers were slightly opposed to married women's teaching than they were to married women's doing other types of work.

The fathers were more opposed to married women's working and teaching than were the mothers.

About as many remarks were in favor of the married woman teacher as were made against her.

The data on the five questions, which were alike in meaning but worded differently, seemed to show to a slight extent that the element of envy did have something to do with the marking of the questionnaires. The opposition toward married women's working was greater on the impersonal questionnaire than on the personal one.

Hunter, Roy O. *A Survey of the Methods Used To Control High School Finances.* 42 pp. (No. 462).

Problem. The problem in this study was to find the method used by school administrators in caring for the funds collected from extracurriculum activities. Other objectives were to find the sources of income, opportunity for student participation, and the selection of the personnel of those in charge of the funds.

Method. For this survey one hundred questionnaires were sent to schools selected at random. Approximately one third of each being sent to small, to medium sized, and to large schools. In addition, a personal visit was made to five schools in each classification.

Replies were received from 72 schools, or a return of 72 per cent. The same questionnaire was made out for schools visited, making a total of 87 schools reporting.

Findings. The accurate control of extracurriculum finances requires much time. Many of the duties are of a routine nature and can be performed by students and teachers. However, the rsponsibility should not all be placed upon them. A board of control should be established which is representative of the students, teachers, and administrators. Definite rules and regulations should be established for the guidance of all participants.

The board of control should establish a uniform method of keeping records of all accounts. Reports should be made for each fund at regular intervals, probably monthly, and a consolidated report for the entire year.

All books should be open for inspection by any one interested in them. An audit of books should be made by some other member than those on the board of control.

The conservation of time should be taken into consideration. No teacher or student should be so burdened with the care of funds that his time is taken from other responsibilities.

Byers, Alfred Sanford. *An Analysis and Critique of Means of Educating Gifted Children and a Recommendation for Stanley Hall School.* 219 pp. (No. 463).

Problem. This study was undertaken with these purposes: (1) to determine from the most reliable sources criteria for the analysis and criticism of means of educating gifted children, (2) to study the means that are being used and plans that are being proposed for the education of gifted children, and (3) to formulate recommendations for a particular school.

Method. The analytical method is directed toward determining and testing all values, social, emotional, etc., of the means used in the education of the gifted child. From twenty sources that represent the opinions of the recognized experts in the field requirements for proper education of gifted children were compiled. The eight requirements that showed the highest degree of agreement among the experts were used as criteria for the study. According to these requirements a program of education for gifted children (1) must be flexible

in curriculum and method, (2) should not change the rate of progress through the elementary school, but should provide enrichment, (3) should provide for creativity, initiative, and originality, (4) should develop a social viewpoint and create stable social-mindedness, (5) should release the gifted from unnecessary drills and formal procedures, (6) should provide opportunities for original investigations based on pupil interests, (7) should train for leadership and social responsibility, and (8) should make use of problem, project, and seminar methods rather than question-answer or recitation methods. Twelve typical means for the education of the gifted chosen as representative of a list of forty-eight froms found in the literature and eight proposed plans for the education of gifted children found in the literature were classified and analyzed in the light of the opinions of educators and in terms of the criteria set up for the study.

FINDINGS AND CONCLUSIONS (IN PART). In terms of school population for practical school situations, there are sixty children in every thousand that are gifted on the average.

The theory of the education of gifted children as it is interpreted by the experts is very similar to the theory of general education for all children as present-day trends show it to be.

Means of educating gifted children that involve acceleration as the chief principle are undesirable. Enrichment of the school experience is preferable.

Segregation of gifted children in special classes with enrichment is an acceptable means but it is administratively impractical except in large schools. Gifted children are best cared for, however, in heterogeneous groups.

The preferred means of educaitng gifted children are: (1) school life activities, extracurricular activities, clubs, etc., on a part-time basis in heterogeneous groups, and (2) project teaching, the activity program, or the progressive school.

Proposed social-age grouping, counting social age as about halfway between mental age and chronological age, under a plan of project teaching is probably preferable to any means now in use for the education of gifted children.

PRICHARD, DORA G. *A History of Secondary Education in Indiana*, 1910 to 1920. 59 pp. (No. 464).

PROBLEM. This study was made of secondary education in Indiana from 1910 to 1920. The writer devoted particular attention to the housing and equipment of the secondary school; to the expansion of the curricula; to increased teacher-training and higher salaries; to longer school terms; to the passage of laws and acts pertaining to secondary education. Special study was made of state aid, relief fund, and the gross cost of secondary education. Particular attention was given to the standardization of teacher-tenure laws and to the unification and expansion of the curricula. The secondary-school system can to a large degree be a means of controlling the education, the habits, and the character of our adolescent youth.

METHOD. The historical method of research was adapted to this study. The primary sources of data were investigated. Only such material which contributed valid evidence was used throughout.

FINDINGS. The merits and demerits of the secondary education in Indiana cannot be estimated until a longer period of time has elapsed. The writer found it to be a period of decided educational expansion and progress in the following fields: (1) improved standards of accredited institutions, (2) raised qualifications of teachers, (3) increased salaries and established minimum salary, (4) improved sanitation of buildings, and (5) consolidation of small school corporations.

THOMAS, CECIL B. *Character and Extent of Recent Agricultural Credit and Its Effect Upon the Solvency of Farmers*. 60 pp. (No. 465).

PROBLEM. As the title suggests, the problem is to learn the extent to which farmers of this decade have been granted credit, and on what terms in contrast with terms and types of loans in the past few decades. Also, it was sought to see what the economic conditions were, the effect upon types of farming, and the effect on the solvency of farmers.

METHOD. Treasury reports, reports of other Federal Departments, of the U. S. Bureau of Agricultural Economics, and of departments of economics of state universities were sources of data. Questionnaires to insurance companies, correspondence with professors of agriculture and county agents, and interviews with bankers, implement dealers, and farmers, supplemented the documentary data.

FINDINGS. Farm income has increased, debt decreased, and mortgage foreclosures decreased, until farmers as a class are in the most substantial condition they have been for years.

WHITAKER, MILDRED E. *Reading in an Experience Program in Light of Recent Educational Research*. 157 pp. (No. 466).

PROBLEM. This study is based upon the assumption that education is the adaptation of the whole organism to its environment; and the writer's purpose in making this study was to allocate reading in the instructional program of the first grade so that reading becomes a means in the realinzation of the educational aim rather than an end in itself.

METHOD. The study was based upon recent interpretations of the learning process, of reading, of experience, and of the aims of the experience program. The study was developed (1) through library research, (2) through observation, (3) through study, (4) through the guidance of a group of beginning children during the school year of 1939 and 1940, (5) through extended observation of behavior through June, 1941, (6) through home visitation and parent co-operation, and (7) through keeping records of characteristics, activities, and reactions of the children's progress, physically, emotionally, socially, and mentally.

FINDINGS. Reading is defined in recent educational terms as a social process based upon experience and is im-

portant to the extent that it contributes to worthy social relationships and understandings. It is one of the learnings that results from school experiences in which the determination of readiness becomes central.

The writer has reached the following conclusions as results of this study:

The outstanding prerequisite to a child's succesful adaptation are (1) that the teacher begin with him where she finds him, (2) that she try to understand his needs and his interests, and (3) that mutual faith be established.

Foundations of personality growth and reading readiness must be developed simultaneously.

If reading experiences in all of the lower grades were planned and executed in the light of these findings, there would be no remedial cases.

This type of procedure might succeed with reading and personality problems even as far as the junior high school.

It will be worth-while to observe these same children during their further progress in the elementary school and to obtain reports from their teachers.

WILLIAMS, MARK. *Courses Needed by Members of the 1939 Freshman Class at Indiana State Teachers College for a Cultural Background on the Basis of Work Done in High School.* 62 pp. (No. 467).

PROBLEM. It was the three-fold purpose of this study (1) to discover to what extent students take excessive work in some fields of high-school work and a minimum of work in other fields; (2) to discover to what extent college students duplicate work already had in high school, and to what extent college help them to duplicate their work; and (3) to present a cultural program for the college.

METHOD. In the registrar's office at Indiana State Teachers College a record is kept of each student's high-school record and also the courses that he has taken in college. From these records were secured the exact pursuits of each student who enrolled as a freshman in the Fall Quarter, 1939, and the high-school courses and units of work already taken. An exact five hundred pupils' records were studied.

FINDINGS. Exactly 8 per cent of the pupils who are graduating from high school fail to meet the state requirements for graduation in an Indiana high school.

Exactely 60 per cent of the students who failed to meet requirements for graduation in an Indiana high school withdrew from Indiana State Teachers College.

Most students who enter Indiana State Teachers College tend to pursue the subjects in which they majored or had excessive units in high school.

Most students who enter Indiana State Teachers College tend to shun those subjects in which they had a minimum of units of work in high school.

There were 42.5 per cent of the students listed as average who withdrew.

There were 47.7 per cent of the students with excessive units of work in some department who withdrew from Indiana State Teachers College.

EDWARDS, EDNA L. *Report of the Guidance of Thirty Problem Children in Grades Five, Six, Seven, and Eight in the Booker T. Washington School, Terre Haute, Indiana.* 1940-1941. 92 pp. (No. 468).

PROBLEM. The purpose of this study was to apply some of the principles of guidance in helping thirty boys and girls of the Booker T. Washington School, Terre Haute, Indiana, to make successful adaptations in all of their experiences and to report the results of this guidance program.

METHOD. A group of teachers, including the writer, selected thirty children from the fifth, sixth, seventh, and eighth grades on the basis of scholarship, cititzenship, and estimated mental ability. The fifth- and sixth-grade children were chosen because they were retarded or were large for their age.

The case-study method of procedure was used. These case studies include (1) age, (2) sex, (3) grade, (4) estimated ability, (5) family background, (6) health history, (7) school record, (8) adjustments, (9) interests, (10) diagnosis of case, (11) remedial measures, and (12) results. The information was obtained (1) from cumulative record cards, (2) from interviews with parents, teachers, and pupils.

Remedial measures used in the guidance of the children inclued: (1) conferences with parents; (2) conferences with the children; (3) suggested reading of books on citizenship; (4) compositions by the children to give reactions to books and to report their progress at school and at home; (5) discussions with other teachers regarding the children's progress in other departments of the school; (6) guiding the children into the worthy activities which they enjoyed and could perform; and (7) helping the children to understand that they must take a positive rather than a negative attitude toward their problems.

FINDINGS. The writer found that there were ten principal causes for the thirty problem cases. She chose the dominant factor in each case. The ten principal causes with the total number of cases for each follow: (1) home conditions (unbroken homes), 7; (2) low mentality, 5; (3) spoiled child, 5; (4) broken home, 3; (5) dishonesty, 3; (6) extreme nervous condition, 2; (7) only child, 2; (8) speech defect, 1; (9) stubbornness, 1; and (10) too rapid growth, 1.

The first three items, (1) home conditions (unbroken homes), (2) low mentality, and (3) spoiled child, describe slightly more than half of the cases.

No results were absolutely satisfactory, since the time was limited to one school year. Some cases, however, showed much improvement; others, just average; many, too little; and a few, none.

The results of this study justify the following recommendations: (1) that Washington School introduce a definite guidance program; (2) that some provision be made by which the pupils may be given intelligence,

achievement, and aptitude tests and the results recorded; (3) that pupils who show ability in special fields and can not do the regular work in the classroom be directed to some other activity or some special work in the field in which they are most capable; (4) that the children who have real ability be encouraged to build a foundation for leadership in their particular fields; (5) that the children who have meager ability be given an opportunity to prepare for the ordinary tasks that must be done and done well; and (6) that some plan be made for medical examination of the children who need it.

HAMILTON, MARIAN R. *How Community Resources May Be Utilized To Enrich The Curriculum And How This May Lead To Varied Art Experiences.* 83 pp. (No. 469).

PROBLEM. This study was undertaken with a two-fold purpose: first, to show how community resources contribute to the enrichment of the curriculum; and second, how the community resources have been and may be used as a starting point for varied art experiences.

METHOD. The materials for this study have been secured through the use of (1) field trips, (2) observations, (3) personal interviews. These have been supplemented by the use of periodicals and books dealing with community resources and how they may enrich the curriculum.

FINDINGS. An abundance of resources are available in this vicinity which may be utilized to enrich art work as well as the curriculum, natural resources of clay and coal; timber, plant life, wild life, gardening, beautiful landscaping of flower gardens, pools, and lawns; industries, such as Commercial Solvents, Corporation, Terre Haute Paper Company, Quaker Maid, and Columbian Enameling and Stamping Company.

Actual problems are included to provide practical illustrations of the use of particular resources in this community as a part of the curriculum:

(1) Unit on Paper
(2) Unit on Nature Study
(3) Unit on Soil Conservation

The projects were carried out in the State Teachers College Laboratory School.

WOLFE, LESLIE C. *An Investigation of the Attitudes of Young People Toward the Churches, and the Prevalence of Traditional Beliefs and Practices in Vigo County, Indiana.* 199 pp. (No. 470).

PROBLEM. The study was undertaken to learn whether churches of Vigo County were losing their hold upon adolescents as determined by their attendance at churches and their orthodoxy.

METHOD. Data were obtained through personal interviews with 269 representative adolescents. The various data were divided into four major groups: Protestant whites, Catholics, Negro, and "non-religion." These groups were subdivided according to age, school attainment, and sex.

FINDINGS. Although the holding power of the Catholic Church is fairly constant, that of Protestant churches declines with age and school attainment of adolescents. Nevertheless, the data do not show the subjects to be godless or churchless people. The belief in God is almost universal, although there is considerable confusions on some theological questions.

PORTER, RUSSELL F. *The Relation Between Observable Classroom Attention and Intelligence.* 45 pp. (No. 471).

PROBLEM. This study was made to attempt to learn the degree to which observable classroom attention is related to intelligence and to add more evidence to that provided by other similar studies.

METHOD. The data for this study were obtained in the Rockville Grade School during the second semester of the school year, 1940-1941. The observer, a teacher in the school, hired a substitute and spent two and one half days gathering data by observing classes taught by three of the regular teachers who taught arithmetic, reading, English, and history to grades five to eight, inclusive. Each of 160 boys and girls was observed a total of 160 minutes.

The observer carefuly studied in advance all details of attention measurement and made several practice observations as opportunity permitted.

During the regular observations a seating chart was used to check the attention or inattention of each pupil. Since all class periods were forty minutes in length, each pupil was observed and checked a total of twenty times during the class, or approximately every two minutes. The results of the observations were compiled and the number of minutes of attention of each pupil recorded. The number of minutes of total observation time for each pupil was divided into the total number of minutes of attention.

Intelligence quotients for use in this study were secured from the results obttained by giving the *Otis Quick Scoring Test of Mental Ability.*

FINDINGS. The results of this study show that there seems to be a lack of relationship between observable classroom attention and intelligence. Specific findings follow:

The coefficients of correlation were low. Two of the correlations were minus while the other five ranged from .0019 to .312.

The intelligence quotient means ranged from 101.96 to 105.55.

The attention quotient means were high, as is shown by a range from .848 to .904.

The girls as a group were more attentive than were the boys.

Pupils of below-average intelligence were more attentive, in proportion to their intelligence, than were pupils of above-average intelligence.

In many cases the lowest attention scores were made by pupils with intelligence quotients near the mean.

HEIDORN, LEO LOUIS. *The Origin and Development of the Educational Program in the Civilian Conservation Corps to the End of the Fiscal Year June 30, 1937.* 187 pp. (No. 475).

PROBLEM. This study evaluates the educational program of the Civilian Conservation Corps and gives to the public the correct conception of what

the Corps is accomplishing, primarily in the educational field, and secondarily in the social-economic status of the individuals concerned.

METHOD. Information was secured through inquiry, by personal observation and experience, from Office of Education pamphlets and reports, from War Department Regulations, from *The Educational Adviser's Handbook*, from periodicals, from newspapers, from written lectures and reports, from books relating to the subject, and from annualand periodical reports of the Director, CCC.

FINDINGS. The CCC has been a social vacuum through which 1,750,000 young men between the ages of seventeen and thiry-five years, and a limited number of older men such as war veterans and Indians, have been syphoned from a world of disuse to one of important commonplace in a progressive democracy. Camp officials of the CCC co-operating with school officials make every effort to encourage and aid enrollees to better their education through study habits, guidance, financial aid, opportunity, and assistance in placement. The CCC does not expect to make experts out of its trainees, but it does expect to make them more employable by making them adaptable to a few of life's vocations in which a young man may be interested. A vast majority of these young men of the CCC who return to regular civil life are better Americans and are better fitted for the complex social life which is the twentieth century program of the United States. The CCC, through its democratic system of living, aids in realizing the American dream of a land in which life should be better and richer and fuller for every man, with opportunity for each in accordance with his own ability and achievement.

ZIMMERMAN, JULIA STANLEY. *The Function of Remedial Work in the Curriculum*. 52 pp. (No. 474).

PROBLEM. It was the purpose of this study to evaluate the factors contributing to the need for remedial instruction in the curriculum.

METHOD. The causal-comparative method of research was used in this study. The data for the study were collected from 7A, 8B, and 8A classes in McLean Junior High School, Terre Haute, Indiana, over a period of two years.

One group called the Reading Room was composed of twenty students. The pupils were selected upon the basis of three F's on their cards at the end of the preceding semester. They were taught by the remedial method.

A second group was known as the integrated arithmetic group. These pupils were selected because of failing grades in arithmetic. This group was taught by the traditional method correlated with the remedial work.

A third group of students was known as the regular group. They had no failing grades and were taught by the traditional method.

The work assigned and the time allotted to the integrated arithmetic group was the same as that for the regular group. The Reading Room was given more remedial work.

FINDINGS. The Reading Room group and the integrated arithmetic group both evidenced definite improvement. The Reading Room group manifested greater improvement than either of the other groups. This difference was probably due to the fact that more remedial work was given this unit and the drill helped to overcome the retardation.

Remedial work serves as motivation for the students. The pupils who had remedial work acquired a larger amount of drill, and thus, failure was prevented.

O'LEARY, VINCENT C. *A Course of in the Physical Sciences for Senior High School Students in The Laboratory School*. 91 pp. (No. 475).

PROBLEM. "De-technicalized" physical science courses have been added to the program of studies of many high schools. The problem of this thesis is to compile units for a one-year course of such nature.

METHOD. Units were selected in light of statements of objectives of science teaching by indivdiuals and committees with great prestige, and by means of analyses of periodical literature to see what terms in physical science were most frequently used, and of analyses of students' interests in physical science. One of the analyses was made by the present investigator, but the others were by earlier investigators.

FINDINGS. The results of the investigation were incorporated into ten units, each of which is outlined in considerable detail. The ten units are: Water, The Atmosphere, Textiles, Foods, Products of Chemistry in Home and Industry, Heat, Energy Applied to Machines, Energy and Its Relation to Sound, Energy Manifested as Light, and Electricity, Radio, and Modern Physics.

ELLIS, JOY H. *A Handbook for Elementary Teachers of The Laboratory School of Indiana State Teachers College*. 99 pp. (No. 476).

PROBLEM. This thesis was a problem in compiling and organizing, into a handbook, necessary and desired information for the elementary teachers of the Laboratory School of Indiana State Teachers College.

METHOD. A committee consisting of the assistant director of the division of teaching in charge of the elementary grades and three elementary teachers, was appointed by the elementary teaching group to make a skeleton outline of desired information. This outline was then submitted to each elementary faculty member for evaluation and suggested additional items. These evaluation and suggestion sheets were collected and a new inclusive outline was formed. This outline was used as the basis for gathering the information.

All items of information were gathered from authentic sources and were approved by the Laboratory School Director and his assistants before being included in the handbook.

To insure completeness of information, logical organization, and the best form, several handbooks of like nature were investigated by the writer.

FINDINGS. The product of the investigation was the handbook itself.

The handbook contains chapters on the following topics: Philosophy of the Laboratory School, Organization of the Laboratory School, Special Facilities, Records and Reports, Book Lists and Fees, Building Regulations, Special Equipment for Teachers' Use, Curriculum and Teaching Practices, Special Policies, Community Service Centers, and Indiana State School Laws and Rulings Pertaining to Elementary Teachers.

BENNETT, ROBERT RAY. *Sanitary Examination of the Water Supplies of the Vigo County Schools.* 24 pp. (No. 477).

PROBLEM. This survey was undertaken with a two-fold purpose; first, to determine the conditions of the water supplies of the Vigo County schools; and, second, to determine a sanitary analysis of well water which is simple enough to be done by any one.

METHOD. Water samples were collected from the schools of Vigo County. These samples were analyzed bacteriologically and chemically.

FINDINGS. The ten schools having the best wells had an average daily attendance of 89 per cent. The average daily attendance of the eleven schools having the lowest ranking wells was 83 per cent. This means that there were about one and one-half times as many absences in the schools having the poorer wells.

The results of the analyses also showed that the wells which were in bad condition always contained ammonia and nitrites. Simple tests for ammonia and nitrites were suggested to be used as a basis for a simplified examination of water to determine potability.

MANUEL, NILA PETTIFORD. *An Investigation to See What Has Become of the English O Students of Indiana State Teachers College.* 55 pp. (No. 478).

PROBLEM. It is the purpose of this study (1) to find how many English courses were taken after the completion of English O; (2) to find the mean scholarship index of the students who continued college work; (3) to find how many were eliminated from college for low scholarship or for other reasons; (4) to find the mean grades in student teaching; (5) to find the mean number of years taught after graduation, if graduated; (6) to find the mean psychological percentile and show its relationship to the above items mentioned; and (7) to find how successful these students are in whatever occupations they are engaged at the present time.

METHOD. Data for this investigation were obtained from the records in the offices of the English Department, the Registrar, and the Alumni Association. A questionnaire was sent to those students who did not graduate to find if they attended any other college after leaving Indiana State Teachers College and to find in what occupations they are engaged up to the present time.

FINDINGS. Those who graduated and those who did not graduate were below the mean of the students body in English 111.

In "Other English Courses," the group who graduated was at the mean of the student body as a whole who did not take English O. Also, in student teaching, their grades were about at the mean of the student body.

The mean scholarship index of those who graduated was 54.96 as compared with 28.26 for those who did not graduate, while the mean index for the student body as a whole was 66.4. There were thirteen eliminated from college for low scholarship.

The mean psychological percentile was 31.75 for the graduates and 20.5 for those who did not graduate, while the mean psychological percentile for the student body was 50.

The grades made by those who graduated were slightly higher than those which were expected of them. Those who did not graduate earned the grades that their psychological percentiles would warrant. Thus, the writer is led to believe that a general relationship exists between intelligence and English ability.

Of the group who graduated, the number of years taught was 4.89 years. None of those who did not graduate had any teaching experience. Both groups showed a wide variety of occupations. "Housework" and "saleswomen" held first and second places, respectively, in the group who graduated, while "oil station operators" and "United States Army" held first and second places, respectively, of those who did not graduate.

KITTLE, MARIAN A. *Analysis and Study of Trends in the Use of Statistical Tools in Educational Research.* 38 pp. (No. 479).

PROBLEM. The two-fold purpose of this study was, first, to determine which statistical tools were most frequently used by leading researchers and statisticians in the field of educational research during the twenty-one-year period, 1920-1940, inclusive; and second, to select those tools which would be most valuable to the classroom teacher who finds himself involved in statistical procedures when making out his monthly and yearly reports, the student of education who is finding himself more and more often facing the problem of interpreting articles of a statistical nature, and the graduate student and other research workers who are planning to write theses or carry on researches of their own.

METHOD. All of the data for this research were taken from the first thirty-three and one half volumes of the *Journal of Educational Research.* Each article published during this period was carefully scanned, and the tools were listed as they were mentioned. The frequency of use of each tool was based on the number of different studies in which it was used and not on the number of times it was mentioned or computed in each of the various studies. Tools mentioned but not actually used in computations were not counted.

FINDINGS. No new tools of any importance have originated since the peoriod, 1926-1930. Neither have any of the frequently used tools of twenty years ago decreased in popularity to any noticeable degree.

Authors were using more than twice as many tools per atricle during the last five years as they were during the first five years.

Tabular and graphic forms are decreasing in number.

In the case of central tendency, the mean has increased in frequency as the median decreased.

According to this study, the number of different tools under each of the six major headings which should be taught in any beginning course in educational statistics are as follows: Central Tendency, three; Variability and Measures of Dispersion, five; Probability, four; Correlation, seven; Miscellaneous, seven; Graphic Presentations, five.

The outstanding need as revealed by this study is a completely standardized vocabulary and standardized symbols.

HENRY, FRANCES HARRIET. *Henry David Thoreau and Amos Bronson Alcott: A Study of Relationships.* 67 pp. (No. 480).

PROBLEM. The problem was to show exactly what Bronson Alcott meant to Thoreau from the standpoint of encouragement and affection. No effort was made to prove any profound "influence" of Alcott on Thoreau for the reason that any such influence seems almost negligible.

METHOD. The procedure was to cover all available material in any way pertaining to Thoreau and Alcott. This included their books, essays, journals, letters, biographies, as well as books and articles referring to them and to the Concord group.

FINDINGS. The study shows the facts of their personal relationship and their differences and smiliarities of attitude toward such common issues as transcendentalism, society, and nature. Finally, the study shows Thoreau's debt to Alcott. Far from negligible is the role of one who led the way in certain paths of thought and action, who brought his friend into contact with some of the great minds of the age, who early recognized and encouraged that friend's genius, who prompted the arch individualist to hew out his own rugged philosophy, and who offered freely at all times the worm glow of human sympathy. These things Bronson Alcott did for Thoreau.

LANDRUM, JEANNETTE. *A Course of Study in Latin American Relations.* 197 pp. (No. 481).

PROBLEM. This study was undertaken to accomplish three things: first, to examine recent literature as to the history and philosophy of progressive education; second, to develop a course of study in Latin American Relations which would incorporate some ideals of the progressive movement, yet still be suitable for use in a conventioal high school; and, third, to summarize materials available for such a course.

METHOD. In the first phase of the work, wide reading in current literature furnished the background for a review of the progressive movement in education. For the course of study and bibliographical references, access was obtained to the books, documents, and periodicals on file in the Hispanic Foundation of the Library of Congress and at the Columbus Memorial Library of the Pan American Union.

FINDINGS. From study of material on the progressive movement, the conclusion to be drawn is that the new school places its emphasis on the learner as an active, not passive, being, whose knowledge will be revealed in desirable social and individual behavior. The strong emphasis placed on democratic procedure would affect all phases of the school, including administration. In the last analysis, however, much of the responsibility for progress in our present system rests upon the classroom teacher.

The course of study in Latin American Relations falls into six units, each containing an overview, list of objectives, words to be mastered, assimilative guide, and suggested tests. The activity plan is followed in the assimilative guide in each unit.

The bibliography and list of materials suitable for high-school use is annotated so as to be as helpful as possible to a teacher entering upon the field of Latin American Relations.

VAUGHN, ELFRIEDA V. *Trends in Research in Supervision of Instruction.* 133 pp. (No. 482).

PROBLEM. It was the purpose of this study: (1) to determine whether or not research in supervision of instruction had decreased from 1921 to 1941; (2) to compare the number of reports of studies made in 1921-1930 and the number of reports of studies made in 1931-1941; (3) to show the phase of supervision of instruction that had been studied most and the phases of supervision of instruction that had been studied less; (4) to present the findings as revealed through an analysis of the studies.

METHOD. The problem was attacked in two ways. First, a survey was made of all the volumes of the *Review of Educational Research*, 1931 to 1941, for articles reporting research in supervision of instruction; and secondly, a survey was made of reports of research in the magazines listed by the *Review of Educational Research*, for the period 1921 to 1931.

All of the studies were analyzed and subsequently classified by specific type under the headings of the master list. The master list consisted of eleven general phases of supervision.

FINDINGS. The writer found eighty-two available studies reported in fifteen periodicals. There were more reports of research found in the *Journal of Educational Method* than any other magazine. The *Elementary School Journal* came second. Individuals connected with the elementary school level made more contributions than the investigators at any other level. Over three-fourths of the investigators used the questionnaire method of obtaining material for their studies.

Research workers have found that the objectives of supervision are in a changing process from rating teachers to guiding them.

An analysis of teachers' attitudes shows that the majority want scientific, democratic supervision.

The reports of actual programs of supervision revealed the fact that many supervisors have adopted the scientific method of supervision. Investigators found that the supervisor should have understanding and ability to stimulate his teachers.

The writer found that the supervisor's duties were numerous and very important. More studies have been made of what to look for than any other phase of supervision. Most studies show that the supervisor should look for the difficulties that teachers encounter.

Teachers meetings are used most frequently as a supervisory device to improve teaching. Studies show that special supervisors are also beginning to apply scientific methods of supervision.

A number of worth-while studies show that the work of un-supervised pupils was inferior to the work of supervised pupils.

MILANOVICH, ANTHONY. *A Collection of Serbian Folk Tales.* 130 pp. (No. 483).

PROBLEM. The purpose of this study is to acquaint readers with the Serbian people, their history, customs, and beliefs. An offort is made to familiarize readers especially with Serbian folk tales.

METHOD. The writer of this study collected his material from several old Serbs who are naturalized citizens of the United States, but who are not able to use the English language with any degree of fluency. Most of them, because of unfavorable circumstances, were not able to attend even the schools of Serbia for any length of time.

The collector of these tales visited with his informants and interested them in telling folk tales, while he wrote as complete notes as possible. Then, with the aid of the notes, he translated the tales into English, being careful to preserve the exact contents of the stories and the manner in which they were told. In the case of the tales written in Serbian, it was necessary to write down every word, so that the tales could be produced word for word.

FINDINGS. The writer of this thesis has collected approximately thiry Serbian folk tales, concerning fairies, heroes, fantastic creatures, and witches; however this collection includes only twelve of them. The first five tales are written in Serbian, each of which is followed by an English translation; while the last seven appear in English only. Since the tales were given no titles, it was necessary for the collector to invent his own.

Index Of Authors

Bell, Everett F., The Parents' Attitude Toward Married Women Teachers, 133 (July).

Bennett, Robert Ray, Equipping a High-School Chemistry Laboratory, 122-124 (July).

Bennett, Robert Ray, Sanitary Examination of the Water Supplies of the Vigo County Schools, 140 (July).

Berryman, Staley, A Handbook of Printing Information for Journalism Teachers, 129 (July).

Bright, Harold, Student Teaching on the Secondary Level, 84-91 (March).

Byers, Alfred Sanford, An Analysis and Critique of Means of Educating Gifted Children and a Recommendation for Stanley Hall School, 133-136 (July).

Callahan, Kenneth, A Project in Elementary Art, 29, 33 (November).

Conlin, Frank D., A Study of the Factors Which Influence the Outside Activities of Boys of the Covington Schools from Fourth to Eighth Grades, 134 (July).

Connette, Earle, Aesthetic Values in Music Education, 38-43 (November).

Crundwell, June, A Poetry Lesson, 16-17 (September).

Daniels, Everett L., An Analysis of Weaknesses of School Bus Drivers in Indiana, 130-131 (July).

Edwards, Edna L., Report of the Guidance of Thirty Problem Children in Grades Five, Six, Seven, and Eight in the Booker T. Washington School, Terre Haute, Indiana, 1940 and 1941, 137-138 (July).

Elliott, Ernest R., An Analysis of the Curriculum Needs of Sullivan High School as Interpreted by the Graduates from 1930 to 1939, 129-130 (July).

Ellis, Joy H., A Handbook for Elementary Teachers of the Laboratory School of Indiana State Teachers College, 139-140 (July).

Frazier, Laura Bigham, A Study of the Causes of Failures in Grades Nine to Twelve in Five Negro High Schools of Kentucky for the School Years 1936-1940, 130 (July).

Goodman, Jere O., A Follow-Up Study of the Graduates of the Laboratory School of Indiana State Teachers College, 131 (July).

Hamilton, Marian R., How Community Resources May Be Utilized To Enrich The Curriculum And How This May Lead To Varied Art Experiences, 138 (July).

Hanlon, James G., Reading Aids to Radio, 112-114 (May).

Harvey, Sara King, The New Organization of Mankato, Minnesota, State Teachers College, 25-28 (November).

Heidorn, Leo Louis, The Origin and Development of the Educational Program in the Civilian Conservation Corps to the End of the Fiscal Year June 30, 1937, 138-139 (July).

Henry, Frances Harriet, Henry David Thoreau and Amos Bronson Alcott: A Study of Relationships, 141 (July).

Holden, John W., A Comparative Survey of the Indiana State Teachers' Association, 133-134 (July).

Howard, Anna S., Emotional Disturbances of Children Which Interfere With Normal Adjustments—Specific Problems of Worry, 132-133 (July).

Hunter, Roy O., A Survey of the Methods Used to Control High School Finances, 133 (July).

Jamison, Olis G., A Center for Supervised Student Teaching, 74, 92 (March).

Kelso, Caroline Stein, Installing a Home Visitation Program in the Home Economics Department of the Laboratory School, 20-22 (September).

Kittle, Marian A., Analysis and Study Trends in the Use of Statistical Tools in Educational Research, 140-141 (July).

Kopel, David, Reading Readiness: Its Determination and Use, 64-70 (January).

Kroggel, R. P., A State Public School Speech Program, 52-54, 63 (January).

Landrum, Jeanette, A Course of Study in Latin American Relations, 141 (July).

Lautenschlager, Harley M., Improving the Teaching of Reading in the Sixth Grade of a Rural Consolidated School, 132 (July).

Lemmon, Paul, An Evaluation of the Centralizing Tendencies in School Administration in Indiana Since 1900, 33-36, 70-71 (January).

LeRoy, George, Three Careers After Twenty-Five Years, 103-105, 111 (May).

Loper, W. F., A Career in One Elementary School, 101-102, 111 (May).

Lundgren, Doris, The Courage in the Heart of You, 121, 126 (July).

Lyda, John W., Negro Contributions to Civilization, 30-31 (January).
Manuel, Nila Pettiford, An Investigation to See What Has Become of the English O Students of Indiana State Teachers College, 140 (July).
Martin, Cecil W., To What Extent Modern Physics Should Be Incorporated in a High School Physics Course, 18-19 (September).
Misner, Paul J., Democracy and the Junior High School, 11-13, 15 (September).
Misner, Paul J., The Work of a Community Co-ordinating Council, 30-32 (November).
Murray, Elwood, The Integrative Functions of Speech, 57-60, 71 (January).
Offett, Morton F., The Relation Between Speech Defects in Children and the Knowledge, Attitudes, and Socio-Economic Status of Parents, 134-135 (July).
O'Leary, V. C., A Course of Study in the Physical Sciences for Senior High School Students in The Laboratory School, 139 (July).
O'Leary, V. C., Scientific Knowledge Necessary for an Intelligent Reading of Periodicals, 115-117 (May).
Parker, Thyrza C., A Career in One High School, 49, 70 (January).
Pfennig, Hazel Tesh, Edward Coote Pnikey: Rationalist Poet (1802-1828), 106-111 (May).
Pfennig, Hazel Tesh, Edward De Vere As Patron, 1550-1604, 14-15 (September).
Porter, Russell F., The Relation Between Observable Classroom Attention and Intelligence, 138 (July).
Prichard, Dora G., A History of Secondary Education in Indiana, 1910 to 1920, 136 (July).
Reed, Mary D., Student Teaching on the Elementary Level, 75-83, 92 (March).
Roney, Claud Horace, Some Investigations in the Teaching of Junior High School Mathematics During the Past Decade, 132 (July).
Russell, George L., Financial Supoprt of the Gary Public School, 131-132 (July).
Shannon, J. R., A Comparison of Site Recitals with More Conventional Modes of Teaching History, 1-10, 22 (September).
Shannon, J. R., Education for Life or Education as Life, 127-128 (July).
Shannon, J. R., Incidence of Practices of Progressive Education in Indiana, 33-35 (November).
Shannon, J. R., What Beginning Teachers Like and What They Dislike About Teaching, 97-100 (May).
Smith, Hubert, Is John Steinbeck "Literary"?, 61-63 (January).
Sorensen, Frederick, Why the Ordinary Child Does Not Like "Good Literature", 46 (November).
Thomas, Cecil B., Character and Extent of Recent Agricultural Credit and Its Effect Upon the Solvency of Indiana Farmers, 136 (July).
Tittle, Thelma, A Handbook for Special Education, 129 (July).
Vaughn, Elfrieda, V., Trends in Research in Supervision of Instruction, 141 (July).
Wampler, Fred, Should Athletics Meet Public Demands?, 36-37 (November).
Wendholt, Charles D., Trends of School Administration Costs in Indiana Over a Ten Year Period —1920-1938, 129 (July).
Whitaker, Mildred E., Reading in an Experience Program in Light of Recent Educational Research, 136-137 (July).
Williams, Mark, Courses Needed by Members of the 1939 Freshman Class at Indiana State Teachers College for a Cultural Background on the Basis of Work Done in High School, 137 (July).
Wolfe, Leslie C., An Investigation of the Attitudes of Young People Toward the Churches, and the Prevalance of Traditional Beliefs and Practices in Vigo County, Indiana, 138 (July).
Zimmerman, Julia Stanley, The Function of Remedial Work in the Curriculum, 139 (July).

Index Of Titles

Administration Costs: Trends of School Administration Costs in Indiana Over a Ten Year Period—1920-1938, Charles D. Wendolt, 129 (July).
Agricultural Credit: Character and Extent of Recent Agricultural Credit and Its Effect Upon Solvency of Indiana Farmers, Cecil B. Thomas, 136 (July).
Athletics: Should Athletics Meet Public Demands?, Fred Wampler, 36-37 (November).
Attention: The Relation Between Observable Classroom Attention and Intelligence, Russell F. Porter, 138 (July).
Beginning Teachers: What Beginning Teachers Like and What They Dislike About Teaching, J. R. Shannon, 97-100 (May).
Bus Drivers: An Analysis of Weaknesses of School Bus Drivers in Indiana, Everett L. Daniels, 130-131 (July).
C. C. C.: The Origin and Development of the Educational Program in the Civilian Conservation Corps and to the End of the Fiscal Year June 30, 1937, Leo Louis Heidorn, 138-139 (July).
Career: A Career in One Elementary School, W. F. Loper, 101-102, 111 (May).
Career: A Career in One High School, Thyrza C. Parker, 49, 70 (January).
Careers: Three Careers After Twenty-Five Years, George LeRoy, 103-105, 111 (May).
Centralizing: An Evaluation of the Centralizing Tendencies in School Administration in Indiana Since 1900, Paul Lemmon 55-56, 70-71 (January).
Chemistry: Equipping a High-School Chemistry Laboratory, Robert Ray Bennett, 122-124 (July).
Community Resources: How Community Resources May Be Utilized To Enrich The Curriculum And How This May Lead To Varied Art Experiences, Marian R. Hamilton, 138 (July).
Competencies: Competencies Aimed at in the Education of Prospective Teachers at Indiana State Teachers College, 125-126 (July).
Co-ordinating Council: The Work of a Community Co-ordinating Council, Paul J. Misner, 30-32 (November).
Courage: The Courage in the Heart of You, Doris Lundgren, 121, 126 (July).
Courses: Courses Needed by Members of the 1939 Freshman Class at Indiana State Teachers College for a Cultural Background on the Basis of Work Done in High School, Mark Williams, 137 (July).
Curriculum: An Analysis of the Curriculum Needs of Sullivan High School as Interpreted by the Graduates from 1930 to 1939, Ernest R. Elliott, 129-130 (July).
Democracy: Democracy and the Junior High School, Paul J. Misner, 11-13, 15 (September).
De Vere: Edward De Vere As Patron, 1550-1604, Hazel Tesh Pfennig, 14-15 (September).

Education: Education for Life or Education as Life, J. R. Shannon, 127-128 (July).

Elementary Art: A Project in Elementary Art, Kenneth Callahan, 29, 35 (November).

Emotional Disturbances: Emotional Disturbances of Children Which Interfere With Normal Adjustments—Specific Problems of Worry, Anna S. Howard, 132-133 (July).

English O: An Investigation to See What Has Become of the English O Students of Indiana State Teachers College, Nila Pettiford Manuel, 140 (July).

Failures: A Study of the Causes of Failures in Grades Nine to Twelve in Five Negro High Schools of Kentucky for the School Years 1936-1940, Laura Bigham Frazier, 130 (July).

Financial Support: Financial Support of the Gary Public Schools, George L. Russell, 131 (July).

Gifted Children: An Analysis and Critique of Means of Educating Gifted Children and a Recommendation for Stanley Hall School, Alfred Sanford Byers, 135-136 (July).

Graduates: A Follow-Up Study of the Graduates of the Laboratory School of Indiana State Teachers College, Jere O. Goodman, 131-132 (July).

Handbook: A Handbook for Elementary School Teachers of The Laboratory School of Indiana State Teachers College, Joy H. Ellis, 139-140 (July).

High-School Finances: A Survey of the Methods Used to Control High School Finances, Roy O. Hunter, 135 (July).

Home Visitation: Installing a Home Visitation Program in the Home Economics Department of the Laboratory School, Caroline Stein Kelso, 20-22 (September).

John Steinbeck: Is John Steinbeck "Literary"?, Hubert Smith, 61-63 (January).

Latin American Relations: A Course of Study in Latin American Relations, Jeannette Landrum, 141 (July).

Literature: Why the Ordinary Child Does Not Like "Good Literature," Frederick Sorensen, 46 (November).

Married Teachers: The Parents' Attitude Toward Married Women Teachers, Everett F. Bell, 135 (July).

Mathematics: Some Investigations in the Teaching of Junior High School Mathematics During the Past Decade, Claud Horace Roney, 132 (July).

Music Education: Aesthetic Values in Music Education, Earle Connette, 38-43 (November).

Negro Contributions: Negro Contributions to Civilization, John W. Lyda, 50-51 (January).

New Organization: The New Organization of Mankato Minnesota, State Teachers College, Sara King Harvey, 25-28 (November).

Objectives: Wartime Objectives of Indiana State Teachers College, 73 (March).

Outside Activities: A Study of the Factors Which Influence the Outside Activities of Boys of the Covington Schools from Fourth to Eighth Grades, Frank D. Conlin, 134 (July).

Physical Sciences: A Course of Study in the Physical Sciences for Senior High School Students in The Laboratory School, V. C. O'Leary, 139 (July).

Physics: To What Extent Modern Physics Should Be Incorporated in a High School Physics Course, Cecil W. Martin, 18-19 (September).

Pinkey: Edward Coote Pinkey: Rationalist Poet (1802-1828), Hazel Trish Pfennig, 106-111 (May).

Poetry: A Poetry Lesson, June Crundwell, 16-17 (September).

Printing: A Handbook of Printing Information for Journalism Teachers, Staley Berryman, 129 (July).

Problem Children: Report of the Guidance of Thirty Problem Children in Grades Five, Six, Seven, and Eight in the Booker T. Washington School, Terre Haute, Indiana, 1940 and 1941, Edna L. Edwards, 137-138 (July).

Progressive Education: Incidence of Practices of Progressive Education in Indiana, J. R. Shannon, 33-35 (November).

Reading: Improving the Teaching of Reading in the Sixth Grade of a Rural Consolidated School, Harley M. Lautenschlager, 132 (July).

Reading: Reading in an Experience Program in Light of Recent Educational Research, Mildred E. Whitaker, 136-137 (July).

Reading Aids: Reading Aids to Radio, James G. Halon, 112-114 (May).

Reading Readiness: Its Determination and Use, David Kopel, 64-70 (January).

Religion: An Investigation of the Attitudes of Young People Toward the Churches, and the Prevalence of Traditional Beliefs and Practices in Vigo County, Indiana, Lesile Wolfe, 138 (July).

Remedical Work: The Function of Remedical Work in the Curriculum, Julia Stanley Zimmerman, 139 (July).

Scientific Knowledge: Scientific Knowledge Necessary for an Intelligent Reading of Periodicals, V. C., O'Leary, 115-117 (May).

Secondary Education: A History of Secondary Education in Indiana, 1910 to 1920, Dora G. Prichard, 136 (July).

Site Recitals: A Comparison of Site Recitals with More Conventional Modes of Teaching History, J. R. Shannon, 1-10, 22 (September).

Special Education: A handbook for Teachers of Special Education, Thelma Tittle, 129 (July).

Speech: The Integrative Functions of Speech, Elwood Murray, 57-60, 71 (January).

Speech Defects: The Relation Between Speech Defects in Children and the Knowledge, Attitudes, and Socio-Economic Status of Parents, Morton F. Offett, 134-135 (July).

Speech Program: A State Public School Speech Program, R. P. Kroggel, 52-54, 63 (January).

Statistical Tools: Analysis and Study Trends in the Use of Statistical Tools in Educational Research, Marian A. Kittle, 140-141 (July).

Student Teaching: A Center for Supervised Student Teaching, Olis G. Jamison, 74, 92 (March).

Student Teaching: Student Teaching on the Elementary Level, Mary D. Reed, 75-83, 92 (March).

Student Teaching: Student Teaching on the Secondary Level, Harold Bright, 84-91 (March).

Supervision of Instruction: Trends in Research in Supervision of Instruction, Elfrieda V. Vaughn, 141 (July).

Teachers' Association: A Comparative Survey of the Indiana State Teachers' Association, John W. Holden, 133-134 (July).

Thoreau: Henry David Thoreau and Amos Bronson Alcott: A Study of Relationships, Frances Harriet Henry, 141 (July).

Water Supplies: Sanitary Examination of the Water Supplies of the Vigo County Schools, Robert Ray Bennett, 140 (July).